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ACIDIC PRECIPITATION IN ONTARIO STUDY - APIOS

1982 DAILY PRECIPITATION CHEMISTRY LISTINGS

MARCH 1984

ARB-056-84-ARSP

API-002-84

Ontario
Ministry of the Environment

The Honourable
Andrew S. Brandt
Minister

Brock A. Smith
Deputy Minister

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This report was prepared by Richard Kirk and Walter Chan of the APIOS Atmospheric Deposition and Chemistry Program. However, the data themselves are a product of the combined efforts of many individuals. Precipitation samples were collected by a large number of site operators, whose names cannot be individually mentioned here, under the coordination of the APIOS environmental technicians Steve Elliott (in Southwestern Region), Dave Allcock and Paul Kehoe (in Southeastern Region), Wim Smits (in Northwestern Region) and J.P. Varto (in Central Region). Sample handling was carried out by Dan Orr and Liane Skelton, and overall network coordination by Bill Bardswick of the Air Resource Branch. Chemical Analysis were performed at the Laboratory Services Branch under the coordination of Frank Tomassini. All equiries regarding the reported data should be directed to Walter Chan, the APIOS Atmospheric Deposition and Chemistry Program Leader (416) 965-1634.

TABLE OF CONTENTS

		Page
PART I	INTRODUCTION	II
PART II	STATION DESCRIPTION AND LOCATION MAP	V
PART III	SOUTHWESTERN REGION DAILY PRECIPITATION CHEMISTRY LISTINGS	

Station Name	Map. Ref. No.	
Longwoods	02	1
Melbourne	01	16
North Easthope	03	25
Wellesley	04	40

PART IV CENTRAL REGION DAILY PRECIPITATION CHEMISTRY LISTINGS

Station Name	Map Ref. No.	
Balsam Lake	06	52
Dorset	08	67
Nithgrove	07	85
Raven Lake	05	97

PART V SOUTHEASTERN REGION DAILY PRECIPITATION CHEMISTRY LISTINGS

Station Name	Map Ref. No.	
Charleston Lake	11	112
Railton	10	127
Graham Lake	12	136
Whitman Creek	09	148

PART VI NORTHWESTERN REGION DAILY PRECIPITATION CHEMISTRY LISTINGS

Station Name	Map Ref. No.	
Fernberg	16	157
Forbes Township	13	166
Lac La Croix	15	178
Quetico Centre	14	184

PART I

INTRODUCTION

INTRODUCTION

The data listed herein are a summary of the 1982 results acquired from the APIOS daily precipitation sampling network. All data presented in this report have been screened for validity. Remarks and qualifications have been appended to records, and/or results where necessary. The screening procedure involved checking each record for chemical analysis integrity (e.g - ionic balance, observed vs. theoretical conductance). Gross limit checks were applied to the results. Upper limit were determined as M + 2S where median (M) and scale (S) represents robust estimates of mean and standard deviation respectively. Scale of the distributon was determined from interquartile distance, i.e. S=0.74 (3rd Quartile - 1st Quartile) based upon logarithmicly transformed results. In a situation where the distribution is significantly bounded by reported detection limits, S may be estimated as follows, S=1.48 (3rd Quartile - 2nd Quartile). All lower gross limits were specified as zero. The data were also screened for outliers statistically by applying the Dixon Ratio test to the highest and lowest values observed in each region on a daily basis. Outliers were determined at the 95% level of confidence. Records and/or results deemed unreliable are flagged but not deleted. Detailed description of the validation procedures as applied to this data set is available from the Ministry upon request.

Samplers utilized for daily precipitation collection include the Aerochem Metrics and SES (Sudbury Environemntal Study) types. At the inception of the network, the primary instrumentation was the Aerochem Metrices type for summer (rain) sampling and the SES type for winter (snow/rain) sampling. At the Dorset, Kingston and London station clusters, the Aerochem Metrics type was utilized from May 1 to October 31 and in the Thunder Bay cluster, from May 1 to September 30. The SES type was utilized from November 1 to April 30 in the Dorset, Kingston and London station clusters and from October 1 to April 30 in the Thunder Bay station cluster. In 1982, it was recognized that under certain conditions, the SES type sampler would not collect representative samples as compared to the Aerochem Metrics sampler, therefore as of the winter (October or November depending on locaiton) of 1982 Aerochem Metrics samplers were used throughout the year.

Station Identification

The station identification is defined by four descriptive fields (e.g. - Dorset/Daily/Aerochem #08). The first field refers to the sampling location. The second and third fields describe the sampling interval and the instrumentation used respectively. The last numeric field refers to the index code utilized on the location map.

Daily Precipitation Chemistry Listings

Sample type, as coded in the data listings, represents the best guess of the type of event which was sampled. All chemical analyses were done on unfiltered samples. Lab pH entries represent pH measurements at the main MOE Laboratory in Toronto while field pH entries represent measurements at regional laboratories. Remark codes (e.g. U,A) appended to individual results are defined in a later section. The tabulated results for "Free H" were calculated from the reported Lab pH. Total hydrogen results, reported as "Total H", represent a titration of the sample with NaOH to an end point pH of 8.3.

Calculation of Equivalent Precipitation Depth (mm)

Aerochem Metrics Instrumentation:

$$\text{Equivalent Precipitation Depth (mm)} = \frac{\text{Volume Collected (ml)} \times 15.6}{1000}$$

SES Instrumentation:

$$\text{Equivalent Precipitation Depth (mm)} = \frac{\text{Volume Collected (ml)} \times 6.1}{1000}$$

Calculation of Observed Sampling Efficiency

$$\%\ \text{Efficiency} = \frac{\text{Equivalent Precipitation Depth (mm)} \times 100\ \%}{\text{Gauge Depth (mm)}}$$

Field Comment Code Index

A - Insects in sample
B - Leaves in sample
C - Particulates in sample
D - Fibres in sample
E - Sample not submitted
F - Sampler malfunctioned
G - Sample spilled or leaked
H - Volume incorrect
I - Event(s) missed
J - Wet side open when not precipitating
K - No precipitation collected
L - Part of event missed
Q - Other

Office Comment Code Index

A - The secondary sample replacing missing primary sample

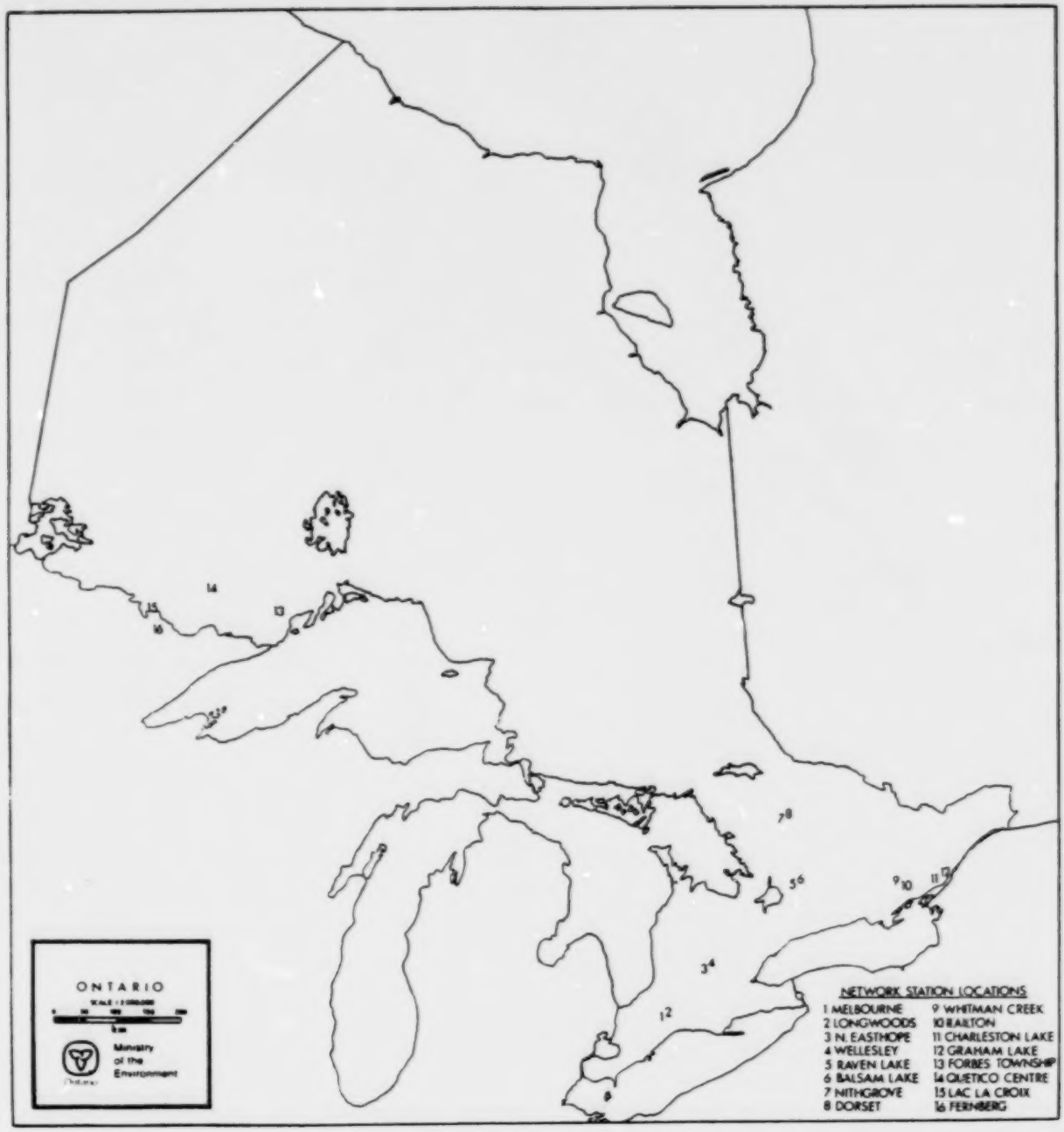
C - Poor calculated vs. observed conductance comparison
J - Δ pH Large
H - Poor calculated vs. observed pH comparison
M - Poor ionic balance
N - Abnormal sampler efficiency
T - Free H^+ exceeds total H^+
X - Sample lost
Y - Collected sample remained in sampler in excess of 24 hours
Z - Non-standard collection period

Result Remark Code Index

> - actual results greater than value reported
< - actual result less than value reported
T - actual result less than criterion of detection
W - no response, minimum possible results reported
A - approximate value
U - unreliable result

PART II

STATION DESCRIPTION AND LOCATION MAP


ONTARIO
Ministry of the Environment
NETWORK STATION LOCATIONS
1 MELBOURNE
2 LONGWOODS
3 N. EASTHOPE
4 WELLESLEY
5 RAVEN LAKE
6 BALSAM LAKE
7 NITHGROVE
8 DORSET
9 WHITMAN CREEK
10 BARLTON
11 CHARLESTON LAKE
12 GRAHAM LAKE
13 FORBES TOWNSHIP
14 QUETICO CENTRE
15 LAC LA CROIX
16 FERNBERG

APIOS EVENT DEPOSITION NETWORK SITE LOCATIONS

AREA	MOE REGION	STATION NAME	ELEVATION (m above MSL)	LATITUDE (North)	LONGITUDE (West)	UTM COORDINATES (Northing)	(Easting)
London	Southwestern	Longwoods Conservations Area	239	42°53'	81°29'	4747850	460700
		Melbourne	213	42°47'	81°33'	4736850	454600
		North Easthope	375	43°24'	80°53'	4805650	508650
		Wellesley	344	43°28'	80°46'	4812650	519500
Dorset	Central	Dorset Lab	320	45°13'	78°56'	5009600	662450
		Nithgrove	325	45°17'	79°04'	5006800	651600
		Balsam Lake Provincial Park	259	44°38'	78°51'	4943400	670070
		Raven Lake	274	44°37'	78°54'	4941600	663750
Kingston	Southeastern	Charleston Lake Provincial Park	92	44°30'	76°03'	4927500	417150
		Graham Lake	130	44°35'	75°52'	4936750	431450
		Railton	156	44°23'	76°36'	4914700	373200
		Whitman Creek	137	44°29'	76°49'	4927200	355100
Thunder Bay	Northwestern	Fernberg	306	47°50'	91°52'	5316000	585000
		Lac la Croix	368	48°21'	92°12'	5356000	558200
		Forbes Twsp.	324	48°38'	89°37'	5388000	308000
		Quetico Centre	420	48°45'	91°12'	5399000	632000

PART III

SOUTHWESTERN REGION

DAILY PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/SES #02 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 3,82	JAN 2,82	800	800	****	****	1	0.3	2	17171	2	1	211		N
JAN 4,82	JAN 3,82	800	830	2200	830	1	5.3	2	17172	2	1	95	D	
JAN 5,82	JAN 4,82	830	830	1800	600	2	1.7	2	17179	2	1	109	D	CM
JAN 7,82	JAN 6,82	830	830	1200	2200	2	0.9	2	17180	2	1	46	D	N
JAN 11,82	JAN 10,82	830	830	1800	830	2	****	*	17182	2	1	****	C	
JAN 12,82	JAN 11,82	830	830	****	****	2	4.1	2	17184	2	1	13	C	N
JAN 13,82	JAN 12,82	830	830	****	****	2	1.7	2	17186	2	1	70	C	
JAN 14,82	JAN 13,82	830	830	830	830	2	2.5	2	17188	2	1	44	CD	N
JAN 15,82	JAN 14,82	830	830	****	****	2	****	*	17190	2	1	****	CD	
JAN 18,82	JAN 17,82	830	830	****	****	2	3.7	2	17192	2	1	56	C	H
JAN 19,82	JAN 18,82	830	830	****	****	2	****	*	17194	2	1	****	E	
JAN 21,82	JAN 20,82	830	830	2130	200	2	3.7	2	17196	2	1	33	C	N
JAN 23,82	JAN 22,82	800	830	****	****	3	14.3	2	17199	2	1	78		
JAN 24,82	JAN 23,82	830	830	****	****	2	****	*	17200	2	1	****	C	
JAN 28,82	JAN 27,82	830	830	600	800	2	0.7	2	17202	2	1	62	C	
JAN 30,82	JAN 29,82	800	830	****	****	2	14.1	2	17204	2	1	91		
JAN 31,82	JAN 30,82	830	915	830	915	3	3.5	2	17206	2	1	38	C	N
FEB 1,82	JAN 31,82	900	1330	****	****	2	11.2	2	17208	2	1	10	C	N
FEB 3,82	FEB 2,82	830	830	635	830	2	****	*	17210	2	1	****	CE	
FEB 4,82	FEB 3,82	830	1230	830	2330	2	15.3	2	17212	2	1	17	C	N
FEB 6,82	FEB 5,82	800	800	****	****	2	0.3	2	17214	2	1	75	CD	
FEB 7,82	FEB 6,82	800	830	****	****	2	4.3	2	17216	2	1	93	C	
FEB 9,82	FEB 8,82	830	1000	2200	930	2	2.9	2	17218	2	1	94	C	
FEB 10,82	FEB 9,82	1000	830	400	700	2	****	*	17220	2	1	****	C	
FEB 11,82	FEB 10,82	830	830	300	645	2	****	*	17222	2	1	****	C	
FEB 14,82	FEB 13,82	800	900	1900	600	2	4.7	2	17224	2	1	70	C	
FEB 19,82	FEB 18,82	800	1200	815	700	3	4.7	2	17226	2	1	99	C	
FEB 21,82	FEB 20,82	800	900	1000	1300	1	2.3	2	17228	2	1	108	C	T
MAR 2,82	MAR 1,82	830	815	1800	815	2	****	*	17230	2	1	****	C	
MAR 3,82	MAR 2,82	815	830	815	1330	2	0.7	2	17232	2	1	70	C	
MAR 5,82	MAR 4,82	800	830	1200	1500	3	12.1	2	17234	2	1	97	C	H
MAR 7,82	MAR 6,82	800	900	2000	100	2	****	*	17236	2	1	****	C	
MAR 8,82	MAR 7,82	900	900	1300	1800	2	****	*	17238	2	1	****	E	
MAR 9,82	MAR 8,82	900	830	2300	400	2	2.2	2	17240	2	1	32	C	N
MAR 10,82	MAR 9,82	830	830	****	****	2	****	*	17242	2	1	****	E	
MAR 11,82	MAR 10,82	830	1030	900	1030	1	3.7	2	17244	2	1	59	C	H
MAR 12,82	MAR 11,82	1030	830	1030	1200	1	2.9	2	17246	2	1	117	C	
MAR 13,82	MAR 12,82	830	830	2200	2330	1	5.4	2	17248	2	1	48	C	N
MAR 17,82	MAR 16,82	830	800	930	1500	1	11.5	2	17250	2	1	97	C	
MAR 18,82	MAR 17,82	800	900	****	****	*	****	*	17252	2	1	****	E	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/SES #02 PAGE : 2

REMOVAL DATE	EXPOSURE DATE		VOLUME ML		CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L		NITRATE AS N MG/L
JAN 3,82	JAN 2,82		104.0		******	******		4.01		******	9.90	U	2.80
JAN 4,82	JAN 3,82		827.0		36.0	******		4.09		0.1198	2.05		0.59
JAN 5,82	JAN 4,82		305.0		37.7	******	U	7.17	U	0.0342	2.20		0.30
JAN 7,82	JAN 6,82	U	68.0		******	******	U	7.24		******	5.80		2.46
JAN 11,82	JAN 10,82		121.0		******	******	U	7.89		******	9.45	U	1.66
JAN 12,82	JAN 11,82	U	88.0		******	******	U	7.05		******	2.50		0.96
JAN 13,82	JAN 12,82		197.0		30.6	******		4.28		******	0.75		1.06
JAN 14,82	JAN 13,82	U	183.0		31.5	******		4.24		******	1.15		0.78
JAN 15,82	JAN 14,82		58.0		******	******		3.82		******	2.25		2.20
JAN 18,82	JAN 17,82		343.0		19.3	******	U	5.78	U	0.0510	1.80		0.98
JAN 19,82	JAN 18,82		******		******	******		******		******	******		******
JAN 21,82	JAN 20,82	U	203.0		21.6	******	U	6.81		******	1.35		0.60
JAN 23,82	JAN 22,82		1845.0		20.2	******		4.58		0.0710	2.70		0.42
JAN 24,82	JAN 23,82		47.0		******	******	U	6.93		******	4.70	U	2.99
JAN 28,82	JAN 27,82		72.0		******	******	U	5.84		******	2.90		1.39
JAN 30,82	JAN 29,82		2125.0		12.6	4.73		4.57		0.0586	0.70		0.31
JAN 31,82	JAN 30,82	U	219.0		21.2	******		4.34		0.0796	1.55		0.42
FEB 1,82	JAN 31,82	U	198.0		******	******		4.34		******	2.25		0.46
FEB 3,82	FEB 2,82		10.0		******	******		******		******	******		******
FEB 4,82	FEB 3,82	U	446.0		18.4	4.58		4.35		0.0740	0.85		0.37
FEB 6,82	FEB 5,82		37.0		******	******	U	4.87		******	2.00		1.12
FEB 7,82	FEB 6,82		662.0		39.2	4.17		4.05		0.1246	1.35		0.98
FEB 9,82	FEB 8,82		448.0		33.9	4.17		4.12		0.1256	1.05		1.15
FEB 10,82	FEB 9,82		20.0		******	******		3.81		******	******		******
FEB 11,82	FEB 10,82		23.0		******	******		3.78		******	******		******
FEB 14,82	FEB 13,82		545.0		70.0	3.86		3.78		0.2004	1.85		2.12
FEB 19,82	FEB 18,82		769.0	U	79.2	3.80		3.80		0.1906	6.25		1.46
FEB 21,82	FEB 20,82		410.0		170.0	3.46		3.49		0.2058	14.00		3.40
MAR 2,82	MAR 1,82		68.0		******	******	U	7.36		******	******		******
MAR 3,82	MAR 2,82		81.0		******	******	U	6.85		******	1.35		0.34
MAR 5,82	MAR 4,82		1929.0		28.2	******		4.56		0.0940	3.95		0.59
MAR 7,82	MAR 6,82		78.0		******	******	U	3.86		******	7.50	U	2.82
MAR 8,82	MAR 7,82		3.0		******	******		******		******	******		******
MAR 9,82	MAR 8,82	U	118.0		******	******	U	6.29		******	2.20		1.59
MAR 10,82	MAR 9,82		******		******	******		******		******	******		******
MAR 11,82	MAR 10,82		361.0	U	103.0	3.67		3.73		0.2534	9.30		1.15
MAR 12,82	MAR 11,82		558.0		55.8	3.93		3.99		0.1576	4.90		1.06
MAR 13,82	MAR 12,82	U	425.0		53.8	3.90		3.96		0.1588	5.25		0.63
MAR 17,82	MAR 16,82		1840.0		27.0	4.46		4.52		0.0910	3.90		0.62
MAR 18,82	MAR 17,82		10.0		******	******		******		******	******		******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/SES #02

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 3,82	JAN 2,82	******	U 1.08	******	******	******	0.350	0.0977
JAN 4,82	JAN 3,82	0.09	0.18	0.010	0.040	0.020	0.258	0.0813
JAN 5,82	JAN 4,82	U 4.40	0.18	U 0.565	0.070	0.070	0.164	U 0.0001
JAN 7,82	JAN 6,82	******	U 1.17	******	******	******	******	U 0.0001
JAN 11,82	JAN 10,82	******	U 4.00	******	******	******	0.160	U 0.0000
JAN 12,82	JAN 11,82	******	U 2.19	******	******	******	******	U 0.0001
JAN 13,82	JAN 12,82	0.57	0.45	0.095	0.020	0.130	0.038	0.0525
JAN 14,82	JAN 13,82	0.41	0.64	0.030	0.080	0.100	0.120	0.0575
JAN 15,82	JAN 14,82	******	0.74	******	******	******	******	0.1514
JAN 18,82	JAN 17,82	U 1.76	0.64	U 0.360	0.080	0.350	0.166	U 0.0017
JAN 19,82	JAN 18,82	******	******	******	******	******	******	******
JAN 21,82	JAN 20,82	U 2.35	1.02	0.280	0.100	U 0.620	0.134	U 0.0002
JAN 23,82	JAN 22,82	1.00	0.28	0.155	0.050	0.150	0.144	0.0263
JAN 24,82	JAN 23,82	******	U 2.71	******	******	******	******	U 0.0001
JAN 28,82	JAN 27,82	******	U 1.59	******	******	******	******	U 0.0014
JAN 30,82	JAN 29,82	0.17	0.26	0.020	0.030	0.130	0.132	0.0269
JAN 31,82	JAN 30,82	0.22	0.21	0.025	0.030	0.070	0.168	0.0457
FEB 1,82	JAN 31,82	0.56	0.23	0.065	0.040	0.100	0.222	0.0457
FEB 3,82	FEB 2,82	******	******	******	******	******	******	******
FEB 4,82	FEB 3,82	0.02	0.18	<T 0.005	0.005	0.030	0.078	0.0447
FEB 6,82	FEB 5,82	******	U 1.50	******	******	******	******	U 0.0135
FEB 7,82	FEB 6,82	0.33	0.55	0.030	0.020	0.140	0.122	0.0891
FEB 9,82	FEB 8,82	0.35	0.44	0.050	0.035	0.350	0.168	0.0759
FEB 10,82	FEB 9,82	******	******	******	******	******	******	0.1549
FEB 11,82	FEB 10,82	******	******	******	******	******	******	0.1660
FEB 14,82	FEB 13,82	0.34	0.61	0.050	0.020	0.305	0.310	0.1660
FEB 19,82	FEB 18,82	U 1.27	U 0.90	0.170	0.055	U 0.550	0.540	0.1585
FEB 21,82	FEB 20,82	0.52	0.66	0.040	0.055	0.115	2.800	0.3236
MAR 2,82	MAR 1,82	******	******	******	******	******	U 1.800	U 0.0000
MAR 3,82	MAR 2,82	******	0.31	******	******	******	0.394	U 0.0001
MAR 5,82	MAR 4,82	U 1.32	0.31	0.205	0.025	0.145	0.460	0.0275
MAR 7,82	MAR 6,82	******	U 1.60	******	******	******	U 1.190	U 0.1380
MAR 8,82	MAR 7,82	******	******	******	******	******	******	******
MAR 9,82	MAR 8,82	U 2.40	1.01	U 0.465	0.025	0.535	0.338	U 0.0005
MAR 10,82	MAR 9,82	******	******	******	******	******	******	******
MAR 11,82	MAR 10,82	U 1.41	U 1.34	0.185	0.080	U 0.775	U 1.590	0.1862
MAR 12,82	MAR 11,82	0.50	0.43	0.040	0.035	0.075	1.060	0.1023
MAR 13,82	MAR 12,82	0.53	0.34	0.070	0.040	0.210	0.460	0.1096
MAR 17,82	MAR 16,82	1.08	0.20	0.190	0.050	0.070	0.420	0.0302
MAR 18,82	MAR 17,82	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/SES #02 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAR 19,82	MAR 18,82	900	1000	2030	2300	1	0.3	2	17254	2	1	34	C	N
MAR 21,82	MAR 20,82	800	900	500	900	1	0.3	2	17256	2	1	266	C	N
MAR 22,82	MAR 21,82	900	900	900	1800	3	0.5	2	17258	2	1	61	CD	
MAR 25,82	MAR 24,82	830	815	1500	1800	1	****	*	17261	2	1	****	C	
MAR 26,82	MAR 25,82	815	830	****	****	2	6.1	2	17262	2	1	105	C	
MAR 27,82	MAR 26,82	830	900	200	600	2	****	*	17265	2	1	****	CD	
MAR 30,82	MAR 29,82	830	830	****	****	1	****	*	17266	2	1	****	E	
MAR 31,82	MAR 30,82	830	1230	1830	2300	1	29.7	2	17268	2	1	101	C	H
APR 1,82	MAR 31,82	1230	1000	1230	1300	1	****	*	17270	2	1	****	E	
APR 3,82	APR 2,82	800	900	****	****	1	9.7	2	17272	2	1	100	C	
APR 6,82	APR 5,82	900	1000	1000	1000	2	16.1	2	17275	2	1	21	C	N
APR 7,82	APR 6,82	1000	830	****	****	2	1.5	2	17278	2	1	59	C	
APR 10,82	APR 9,82	830	1000	****	****	3	3.8	2	17280	2	1	180	C	N
APR 13,82	APR 12,82	1000	1200	800	1100	1	1.5	2	17282	2	1	66	C	HC
APR 17,82	APR 15,82	800	900	1700	200	1	11.2	2	17284	2	1	****	EG	
APR 18,82	APR 17,82	900	900	1800	1900	1	1.0	1	17286	2	1	159	C	N
APR 20,82	APR 19,82	830	915	2000	915	1	9.1	2	17288	2	1	29	AC	N
APR 26,82	APR 25,82	830	830	****	****	1	****	*	17290	2	1	****	E	
APR 27,82	APR 26,82	830	1200	2100	2400	1	2.5	2	17292	2	1	111	ABCD	JH

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/SES #02

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAR 19,82	MAR 18,82	U 17.0	******	******	******	******	******	******
MAR 21,82	MAR 20,82	131.0	U 265.0	******	U 3.43	0.5424	******	******
MAR 22,82	MAR 21,82	50.0	******	******	U 3.49	******	U 18.00	U 3.80
MAR 25,82	MAR 24,82	41.0	******	******	U 6.73	0.0488	U 10.00	> 2.00
MAR 26,82	MAR 25,82	1056.0	17.8	4.47	4.52	0.0508	1.55	0.39
MAR 27,82	MAR 26,82	22.0	******	******	U 5.88	0.0232	2.70	0.19
MAR 30,82	MAR 29,82	******	******	******	******	******	******	******
MAR 31,82	MAR 30,82	4928.0	19.0	4.39	4.57	0.0458	2.25	0.33
APR 1,82	MAR 31,82	13.0	******	******	******	******	******	******
APR 3,82	APR 2,82	1592.0	14.9	U 6.62	U 6.62	U 0.0226	2.45	0.28
APR 6,82	APR 5,82	U 577.0	8.8	6.43	6.43	0.0332	0.60	0.36
APR 7,82	APR 6,82	146.0	******	******	U 6.80	0.0252	2.40	0.17
APR 10,82	APR 9,82	1125.0	29.7	4.29	4.40	0.0780	3.25	0.67
APR 13,82	APR 12,82	163.0	17.5	******	U 5.49	U 0.0784	U 18.00	U 3.30
APR 17,82	APR 16,82	1600.0	******	******	******	******	******	******
APR 18,82	APR 17,82	261.0	52.2	******	4.14	0.1084	7.85	0.79
APR 20,82	APR 19,82	U 447.0	43.6	4.14	4.26	0.0936	5.65	1.10
APR 26,82	APR 25,82	******	******	******	******	******	******	******
APR 27,82	APR 26,82	455.0	40.7	4.48	U 5.04	0.0704	8.00	1.34

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/SES #02

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAR 19,82	MAR 18,82	******	******	******	******	******	******	******
MAR 21,82	MAR 20,82	U 7.35	******	U 1.000	0.340	U 0.635	U 2.000	U 0.3715
MAR 22,82	MAR 21,82	******	U 1.26	******	******	******	******	U 0.3236
MAR 25,82	MAR 24,82	******	U 1.53	******	******	******	******	U 0.0002
MAR 26,82	MAR 25,82	0.28	0.08	0.040	0.010	0.040	0.390	0.0302
MAR 27,82	MAR 26,82	******	0.28	******	******	******	******	U 0.0013
MAR 30,82	MAR 29,82	******	******	******	******	******	******	******
MAR 31,82	MAR 30,82	0.67	0.32	0.090	0.030	0.230	0.290	0.0269
APR 1,82	MAR 31,82	******	******	******	******	******	******	******
APR 3,82	APR 2,82	U 1.44	0.09	0.285	0.030	0.045	0.218	U 0.0002
APR 6,82	APR 5,82	0.83	0.15	0.185	0.030	0.095	0.094	0.0004
APR 7,82	APR 6,82	U 1.44	0.24	U 0.415	0.045	0.155	0.198	U 0.0002
APR 10,82	APR 9,82	0.56	0.09	0.115	<T 0.015	0.050	0.580	0.0398
APR 13,82	APR 12,82	U 4.94	0.91	U 0.665	0.460	0.355	U 3.450	U 0.0032
APR 17,82	APR 16,82	******	******	******	******	******	******	******
APR 18,82	APR 17,82	0.75	0.34	0.215	0.060	0.170	1.200	0.0724
APR 20,82	APR 19,82	1.19	0.25	0.215	0.040	0.045	0.800	0.0550
APR 26,82	APR 25,82	******	******	******	******	******	******	******
APR 27,82	APR 26,82	U 2.35	0.45	U 0.460	0.090	0.175	U 1.320	U 0.0091

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAY 8,82	MAY 7,82	900	830	200	800	1	4.5	1	17294	2	1	115	C	JH
MAY 20,82	MAY 19,82	800	800	1830	2100	1	8.4	1	17296	2	1	90	C	
MAY 22,82	MAY 21,82	800	800	500	700	1	2.3	1	17298	2	1	101	C	
MAY 23,82	MAY 22,82	800	800	****	****	1	0.3	1	17300	2	1	93		
MAY 27,82	MAY 26,82	830	830	2400	445	1	2.2	1	17303	2	1	95	CD	
MAY 28,82	MAY 27,82	830	830	1900	100	1	40.0	1	17304	2	1	110		M
JUN 1,82	MAY 31,82	830	900	400	830	1	5.4	1	17307	2	1	96	D	
JUN 2,82	JUN 1,82	900	1530	****	****	1	6.4	1	17309	2	1	97		
JUN 6,82	JUN 5,82	800	800	900	2100	1	23.1	1	17311	2	1	101		
JUN 8,82	JUN 7,82	830	900	2230	200	1	2.0	1	17313	2	1	92	CD	HM
JUN 16,82	JUN 15,82	830	1000	1900	2200	1	23.5	1	17315	2	1	97	CD	
JUN 19,82	JUN 18,82	800	930	800	930	1	14.0	1	17317	2	1	101	C	T
JUN 20,82	JUN 19,82	930	830	****	****	1	1.6	1	17319	2	1	85	CD	
JUN 21,82	JUN 20,82	830	830	1700	2200	1	16.6	1	17322	2	1	103	C	
JUN 22,82	JUN 21,82	830	****	****	****	1	1.2	1	17323	2	1	****	E	
JUN 26,82	JUN 25,82	800	930	2300	2400	1	15.6	1	17325	2	1	99	C	
JUN 29,82	JUN 28,82	830	1220	1100	1240	1	18.2	1	17327	2	1	103	AC	
JUL 5,82	JUL 4,82	800	930	1100	1400	1	4.6	1	17329	2	1	87	DJ	
JUL 11,82	JUL 10,82	800	900	2300	2330	1	4.4	1	17331	2	1	103		C
JUL 12,82	JUL 11,82	830	900	600	620	1	3.4	1	17333	2	1	97	C	
JUL 15,82	JUL 14,82	830	1010	2300	530	1	7.6	1	17335	2	1	****	CG	
JUL 17,82	JUL 16,82	830	1000	630	800	1	8.2	1	17337	2	1	112	C	
JUL 27,82	JUL 26,82	830	930	300	430	1	2.6	1	17339	2	1	88	C	H
JUL 28,82	JUL 27,82	930	900	200	600	1	4.8	1	17341	2	1	64	C	T
JUL 31,82	JUL 30,82	800	1000	2100	2130	1	5.0	1	17343	2	1	89	ADJ	
AUG 2,82	AUG 1,82	800	900	630	800	1	25.0	1	17345	2	1	134	AD	N
AUG 8,82	AUG 7,82	800	1100	400	600	1	24.6	1	17347	2	1	101	ACD	M
AUG 20,82	AUG 19,82	830	830	400	530	1	2.4	1	17349	2	1	65	CD	
AUG 21,82	AUG 20,82	830	830	700	800	1	3.0	1	17351	2	1	78	C	C
AUG 23,82	AUG 22,82	830	830	1400	1800	1	2.2	1	17353	2	1	78	CD	
AUG 25,82	AUG 24,82	830	830	2230	200	1	39.0	1	17355	2	1	95	C	
AUG 30,82	AUG 29,82	830	830	1700	2300	1	4.2	1	17357	2	1	83	C	
SEP 3,82	SEP 2,82	830	930	1700	1900	1	6.4	1	17358	2	1	108	C	
SEP 7,82	SEP 6,82	830	800	1100	1300	1	0.4	1	17360	2	1	42	CD	N
SEP 15,82	SEP 14,82	830	1230	1700	2000	1	6.4	1	17362	2	1	93	CD	
SEP 18,82	SEP 17,82	800	900	2200	100	1	11.0	1	17364	2	1	99	AC	
SEP 22,82	SEP 21,82	930	830	400	830	1	4.6	1	17366	2	1	98	C	T
SEP 23,82	SEP 22,82	830	800	830	800	1	18.0	1	17368	2	1	98		T
SEP 24,82	SEP 23,82	800	830	400	830	1	1.8	1	17376	2	1	58	CD	
SEP 25,82	SEP 24,82	800	800	2300	1300	1	20.7	1	17370	2	1	99		T

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAY 8,82	MAY 7,82	332.0	18.6	5.00	5.73	0.0756	3.30	0.41
MAY 20,82	MAY 19,82	485.0	41.0	4.34	4.59	0.0932	7.55	0.81
MAY 22,82	MAY 21,82	149.0	******	******	3.41	0.4788	15.05	3.70
MAY 23,82	MAY 22,82	18.0	******	******	4.42	0.1008	******	******
MAY 27,82	MAY 26,82	134.0	******	******	3.70	0.2720	10.20	1.43
MAY 28,82	MAY 27,82	2826.0	35.4	4.08	4.19	0.0952	3.45	0.44
JUN 1,82	MAY 31,82	334.0	33.8	4.08	4.20	0.0954	3.15	0.36
JUN 2,82	JUN 1,82	401.0	32.8	4.14	4.23	0.0966	3.15	0.40
JUN 6,82	JUN 5,82	1496.0	10.6	4.54	4.69	0.0402	0.90	0.14
JUN 8,82	JUN 7,82	119.0	******	******	3.66	0.2720	17.40	1.53
JUN 16,82	JUN 15,82	1471.0	26.6	4.34	4.39	0.0654	3.20	0.43
JUN 19,82	JUN 18,82	911.0	39.1	4.10	4.01	0.0964	4.20	0.43
JUN 20,82	JUN 19,82	88.0	******	******	3.97	0.1120	4.65	0.26
JUN 21,82	JUN 20,82	1102.0	22.0	4.37	4.32	0.0568	2.35	0.36
JUN 22,82	JUN 21,82	******	******	******	******	******	******	******
JUN 26,82	JUN 25,82	995.0	43.8	4.08	4.07	0.1044	5.25	0.89
JUN 29,82	JUN 28,82	1205.0	63.0	3.80	3.87	0.1642	5.70	0.65
JUL 3,82	JUL 4,82	258.0	97.5	3.69	3.71	0.2400	9.95	1.69
JUL 11,82	JUL 10,82	291.0	93.0	3.32	3.36	0.4960	U 18.75	U 2.05
JUL 12,82	JUL 11,82	212.0	31.5	******	4.30	0.0736	3.80	0.47
JUL 15,82	JUL 14,82	383.0	64.5	3.85	3.86	0.1600	6.60	0.82
JUL 17,82	JUL 16,82	593.0	32.2	4.17	4.29	0.0754	3.25	0.53
JUL 27,82	JUL 26,82	148.0	25.7	******	5.15	0.0418	3.95	1.11
JUL 28,82	JUL 27,82	200.0	59.5	3.89	3.84	0.1376	6.80	1.00
JUL 31,82	JUL 30,82	286.0	70.5	3.93	3.89	0.1406	9.40	1.19
AUG 2,82	AUG 1,82	2151.0	21.6	4.36	4.47	0.0490	2.35	0.30
AUG 8,82	AUG 7,82	1598.0	50.5	3.92	4.10	0.1444	5.10	0.44
AUG 20,82	AUG 19,82	100.0	21.9	******	4.43	0.0566	3.90	0.59
AUG 21,82	AUG 20,82	151.0	8.9	******	6.61	0.0272	0.30	0.14
AUG 23,82	AUG 22,82	111.0	49.2	******	4.01	0.1222	7.05	0.86
AUG 25,82	AUG 24,82	2391.0	21.9	4.32	4.36	0.0660	2.20	0.25
AUG 30,82	AUG 29,82	224.0	******	4.27	4.26	0.0752	3.55	0.43
SEP 3,82	SEP 2,82	446.0	26.0	4.35	4.30	0.0872	2.95	0.72
SEP 7,82	SEP 6,82	U 11.0	******	******	******	******	******	******
SEP 15,82	SEP 14,82	384.0	39.1	4.14	4.10	0.0982	4.80	0.77
SEP 18,82	SEP 17,82	703.0	35.2	4.11	4.14	0.1006	3.90	0.74
SEP 22,82	SEP 21,82	290.0	40.0	4.03	3.92	0.1124	3.00	0.83
SEP 23,82	SEP 22,82	1140.0	31.0	4.12	4.02	0.0884	2.60	0.42
SEP 24,82	SEP 23,82	68.0	******	******	3.97	0.1188	7.70	1.20
SEP 25,82	SEP 24,82	1317.0	43.5	4.00	3.90	0.1218	4.10	0.65

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L		CHLORIDE MG/L		MAGNESIM MG/L		POTASSIM MG/L		SODIUM MG/L		AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAY 8,82	MAY 7,82	0.91		0.23		0.190		0.150		0.135		0.720	0.0019
MAY 20,82	MAY 19,82	1.77		0.71		0.320		0.140		0.065		1.200	0.0257
MAY 22,82	MAY 21,82	0.71		0.81		0.125		0.115		0.105		1.670	0.3890
MAY 23,82	MAY 22,82	******		******		******		******		******		******	0.0380
MAY 27,82	MAY 26,82	0.44		0.28		0.085		0.040		0.035		0.820	0.1995
MAY 28,82	MAY 27,82	0.06		0.05		0.010	<T	0.010	<T	0.010		0.258	0.0646
JUN 1,82	MAY 31,82	0.11		0.09		0.025		0.030		0.030		0.226	0.0631
JUN 2,82	JUN 1,82	0.10		0.08		0.015		0.025		0.015		0.368	0.0589
JUN 6,82	JUN 5,82	0.06	<W	0.01		0.010	<T	0.010	<T	0.010		0.158	0.0204
JUN 8,82	JUN 7,82	1.32		0.48		0.180		0.140		0.185		1.270	0.2188
JUN 16,82	JUN 15,82	0.48		0.09		0.090		0.120		0.030		0.440	0.0407
JUN 19,82	JUN 18,82	0.21		0.26		0.035	U	0.280	U	0.135		0.560	0.0977
JUN 20,82	JUN 19,82	******		0.16		******		******		******		******	0.1072
JUN 21,82	JUN 20,82	0.17		0.05		0.025		0.075		0.015		0.500	0.0479
JUN 22,82	JUN 21,82	******		******		******		******		******		******	******
JUN 26,82	JUN 25,82	0.63		0.13		0.115		0.060		0.035		0.780	0.0851
JUN 29,82	JUN 28,82	0.12		0.13		0.015		0.020		0.025		0.288	0.1349
JUL 5,82	JUL 4,82	1.00		0.38		0.205		0.040		0.060		1.060	0.1950
JUL 11,82	JUL 10,82	0.76		0.59		0.135		0.065		0.075		0.950	0.4365
JUL 12,82	JUL 11,82	0.47		0.20		0.110		0.055		0.035		0.500	0.0501
JUL 15,82	JUL 14,82	0.37		0.16		0.100		0.070		0.025		0.590	0.1380
JUL 17,82	JUL 16,82	0.46		0.16		0.095		0.030		0.050		0.370	0.0513
JUL 27,82	JUL 26,82	0.95		0.35		0.120		0.160		0.120		1.210	0.0071
JUL 28,82	JUL 27,82	0.71		0.24		0.130	U	0.105	U	0.045		0.690	0.1445
JUL 31,82	JUL 30,82	1.44		0.39		0.425		0.110		0.035		0.860	0.1288
AUG 2,82	AUG 1,82	0.26		0.10		0.035		0.075		0.025		0.364	0.0339
AUG 8,82	AUG 7,82	0.13		0.13		0.020		0.055		0.030		0.370	0.0794
AUG 20,82	AUG 19,82	0.72		0.14		0.170		0.150		0.045		0.540	0.0372
AUG 21,82	AUG 20,82	0.27		0.33		0.055		0.355		0.240		0.332	0.0002
AUG 23,82	AUG 22,82	0.94		0.28		0.205		0.235		0.070		0.890	0.0977
AUG 25,82	AUG 24,82	0.06	<T	0.02		0.015		0.055		0.015		0.254	0.0437
AUG 30,82	AUG 29,82	0.37		0.21		0.110		0.045		0.225		0.252	0.0550
SEP 3,82	SEP 2,82	0.51		0.17		0.110		0.045		0.045		0.590	0.0501
SEP 7,82	SEP 6,82	******		******		******		******		******		******	******
SEP 15,82	SEP 14,82	0.59		0.24		0.085		0.050		0.055		0.970	0.0794
SEP 18,82	SEP 17,82	0.42		0.31		0.090		0.225		0.100		0.162	0.0724
SEP 22,82	SEP 21,82	0.23		0.13		0.025		0.120		0.125		0.368	0.1202
SEP 23,82	SEP 22,82	0.11		0.19		0.020		0.050		0.025		0.152	0.0955
SEP 24,82	SEP 23,82	> 2.00		0.41		0.365		0.150		0.170		******	0.1072
SEP 25,82	SEP 24,82	0.15		0.10		0.025		0.050		0.035		0.640	0.1259

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
SEP 26,82	SEP 25,82	800	800	900	1300	1	2.8	1	17378	2	1	74	CD	T
SEP 27,82	SEP 26,82	830	1000	2100	1000	1	27.0	1	17372	2	1	93	C	
SEP 28,82	SEP 27,82	1000	945	1000	1400	1	5.2	1	17374	2	1	90	C	
OCT 8,82	OCT 7,82	830	830	900	1600	1	8.4	1	17380	2	1	83	C	
OCT 11,82	OCT 10,82	800	810	****	****	1	6.2	1	17382	2	1	100	C	
OCT 15,82	OCT 14,82	830	830	1200	1700	1	3.8	1	17384	2	1	92	C	JH
OCT 16,82	OCT 15,82	800	900	****	****	2	****	*	17386	2	1	****	D	HM
OCT 17,82	OCT 16,82	900	900	900	200	3	24.8	1	17388	2	1	84	C	HM
OCT 18,82	OCT 17,82	900	1000	1200	1400	1	0.6	1	17390	2	1	7	C	N
OCT 21,82	OCT 20,82	830	900	900	1200	1	5.8	1	17392	2	1	101	C	
OCT 22,82	OCT 21,82	830	1130	600	730	1	0.4	1	17394	2	1	19	C	N
OCT 31,82	OCT 30,82	830	945	1100	945	1	6.6	1	17396	2	1	107	C	
NOV 2,82	NOV 1,82	945	930	2200	230	1	21.2	1	17398	2	1	100	C	J
NOV 3,82	NOV 2,82	930	1000	2000	2330	1	11.8	1	17400	2	1	96		
NOV 4,82	NOV 3,82	1000	845	500	845	1	4.4	1	17402	2	1	91		
NOV 6,82	NOV 5,82	830	900	900	1800	2	****	*	17404	2	1	****	CD	
NOV 10,82	NOV 9,82	845	1045	100	1045	1	1.2	1	17406	2	1	61	CD	
NOV 11,82	NOV 10,82	1045	900	****	****	1	8.6	1	17408	2	1	98	C	
NOV 12,82	NOV 11,82	900	830	1400	1530	1	14.6	1	17410	2	1	96	C	
NOV 13,82	NOV 12,82	830	800	830	1200	1	9.9	2	17412	2	1	111	C	
NOV 20,82	NOV 19,82	800	900	100	900	1	11.9	2	17414	2	1	101		C
NOV 21,82	NOV 20,82	900	900	****	****	1	20.7	2	17416	2	1	97	CD	
NOV 22,82	NOV 21,82	900	930	900	1400	1	0.5	2	17418	2	1	53	CD	
NOV 26,82	NOV 23,82	800	815	830	2000	1	16.3	2	17420	2	1	98	C	
NOV 27,82	NOV 26,82	800	800	900	1100	2	4.7	2	17422	2	1	18		N
NOV 29,82	NOV 28,82	800	830	1200	630	1	17.1	2	17424	2	1	84	C	
NOV 30,82	NOV 29,82	830	830	930	2000	1	0.5	2	17426	2	1	24		N
DEC 3,82	DEC 2,82	800	800	1000	2000	1	1.7	2	17429	2	1	133	C	N
DEC 4,82	DEC 3,82	800	800	2300	100	1	8.9	2	17432	2	1	107		
DEC 5,82	DEC 4,82	800	900	300	800	1	2.1	2	17435	2	1	108		
DEC 6,82	DEC 5,82	900	1000	****	****	1	10.9	2	17438	2	1	100		
DEC 7,82	DEC 6,82	830	1230	****	****	1	****	*	17441	2	1	****	C	
DEC 9,82	DEC 8,82	800	930	1830	830	2	7.9	2	17444	2	1	****	IKE	
DEC 10,82	DEC 9,82	930	1000	530	630	2	****	*	17447	2	1	****	EK	
DEC 12,82	DEC 11,82	830	830	****	****	2	****	*	17450	2	1	****	IKE	
DEC 13,82	DEC 12,82	830	900	****	****	2	0.7	2	17453	2	1	****	IKE	
DEC 15,82	DEC 14,82	830	1400	****	****	1	0.7	2	17456	2	1	102	C	
DEC 16,82	DEC 15,82	1400	900	1400	900	1	20.1	2	17459	2	1	101		
DEC 17,82	DEC 16,82	900	900	****	****	1	****	*	17462	2	1	****	KE	
DEC 19,82	DEC 18,82	800	800	****	****	1	4.3	2	17465	2	1	69	D	J

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02 PAGE : 5

REMOVAL DATE	EXPOSURE DATE		VOLUME ML		CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
SEP 26,82	SEP 25,82		133.0	U	120.0	******		3.46	U	0.3220	U	11.15	U	2.37
SEP 27,82	SEP 26,82		1619.0		17.5	4.43		4.31		0.0500		1.50		0.22
SEP 28,82	SEP 27,82		300.0		31.0	4.17		4.06		0.0922		3.00		0.41
OCT 8,82	OCT 7,82		447.0		35.6	4.14		4.07		0.1204		4.35		0.39
OCT 11,82	OCT 10,82		401.0		55.0	3.95		3.84		0.1586		5.25		0.83
OCT 15,82	OCT 14,82		226.0		******	5.05		5.55		0.0412		3.70		0.45
OCT 16,82	OCT 15,82		814.0		3.2	5.78		5.66		0.0372		0.20	<T	0.01
OCT 17,82	OCT 16,82		1341.0		2.6	5.40		5.49		0.0286		0.20	<T	0.01
OCT 18,82	OCT 17,82	U	3.0		******	******		******		******		******		******
OCT 21,82	OCT 20,82		377.0		23.9	4.33		4.28		0.0892		2.85		0.26
OCT 22,82	OCT 21,82	U	5.0		******	******		******		******		******		******
OCT 31,82	OCT 30,82		453.0		23.5	4.54		4.34		0.0704		2.90		0.45
NOV 2,82	NOV 1,82		1366.0		11.6	3.99		4.59		0.0430		0.95		0.13
NOV 3,82	NOV 2,82		728.0		18.9	4.40		4.34		0.0648		1.65		0.29
NOV 4,82	NOV 3,82		257.0		******	4.12		4.08		0.1002		2.05		0.80
NOV 6,82	NOV 5,82		12.0		******	******	U	5.78		0.0366		******		******
NOV 10,82	NOV 9,82		47.0		******	******		3.65		0.2320		6.80		2.57
NOV 11,82	NOV 10,82		543.0		30.7	4.15		4.12		0.1026		3.05		0.52
NOV 12,82	NOV 11,82		900.0		21.5	4.32		4.28		0.0766		2.35		0.30
NOV 13,82	NOV 12,82		705.0		16.0	4.44		4.43		0.0654		1.60		0.20
NOV 20,82	NOV 19,82		776.0		37.0	4.32		4.27		0.0684		2.10		0.27
NOV 21,82	NOV 20,82		1296.0		18.0	4.46		4.46		0.0594		2.40		0.32
NOV 22,82	NOV 21,82		17.0		******	******	U	6.33	U	0.0272		******		******
NOV 24,82	NOV 23,82		1030.0		18.5	4.42		4.45		0.0676		1.55		0.20
NOV 27,82	NOV 26,82	U	56.0		******	******	U	6.28	U	0.0258		1.20		0.24
NOV 29,82	NOV 28,82		927.0		28.5	4.23		4.29		0.0950		2.30		0.34
NOV 30,82	NOV 29,82	U	8.0		******	******		******		******		******		******
DEC 3,82	DEC 2,82		146.0		******	******		3.97		0.1134		4.35		0.44
DEC 4,82	DEC 3,82		614.0		19.3	4.38		4.38		0.0574		1.70		0.24
DEC 5,82	DEC 4,82		146.0		******	******		4.14		0.0796		2.65		0.41
DEC 6,82	DEC 5,82		701.0		14.5	4.56		4.52		0.0520		1.30		0.12
DEC 7,82	DEC 6,82		12.0		******	******		******		******		******		******
DEC 9,82	DEC 8,82		******		******	******		******		******		******		******
DEC 10,82	DEC 9,82		******		******	******		******		******		******		******
DEC 12,82	DEC 11,82		******		******	******		******		******		******		******
DEC 13,82	DEC 12,82		******		******	******		******		******		******		******
DEC 15,82	DEC 14,82		46.0		******	******		3.97		0.1572		6.25		1.14
DEC 16,82	DEC 15,82		1302.0		17.4	4.46		4.53		0.0546		1.20		0.25
DEC 17,82	DEC 16,82		******		******	******		******		******		******		******
DEC 19,82	DEC 18,82		192.0		71.8	3.64		4.07		0.1188		8.90		1.29

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02 PAGE : 6

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 26,82	SEP 25,82	0.62	0.47	0.130	0.160	0.110	U 1.660	0.3467
SEP 27,82	SEP 26,82	0.04	0.07	0.005	0.010	0.005	0.190	0.0490
SEP 28,82	SEP 27,82	0.19	0.16	0.025	0.020	0.025	0.370	0.0871
OCT 8,82	OCT 7,82	0.44	0.21	0.075	0.085	0.095	0.470	0.0951
OCT 11,82	OCT 10,82	0.43	0.34	0.065	0.215	0.150	0.700	0.1445
OCT 15,82	OCT 14,82	0.90	0.48	0.175	0.090	0.065	0.750	0.0028
OCT 16,82	OCT 15,82	0.13	0.13	0.015	0.040	0.065	0.112	0.0022
OCT 17,82	OCT 16,82	0.07	<T 0.02	0.005	0.015	<W 0.005	0.060	0.0032
OCT 18,82	OCT 17,82	******	******	******	******	******	******	******
OCT 21,82	OCT 20,82	0.37	0.37	0.080	0.030	0.210	0.204	0.0525
OCT 22,82	OCT 21,82	******	******	******	******	******	******	******
OCT 31,82	OCT 30,82	0.70	0.15	0.105	0.050	0.090	0.284	0.0457
NOV 2,82	NOV 1,82	0.08	0.04	0.020	0.005	0.010	0.080	0.0257
NOV 3,82	NOV 2,82	0.08	0.10	0.015	0.025	0.075	0.228	0.0457
NOV 4,82	NOV 3,82	0.15	0.13	0.025	0.055	0.040	0.390	0.0832
NOV 6,82	NOV 5,82	******	******	******	******	******	******	U 0.0017
NOV 10,82	NOV 9,82	******	0.73	******	******	******	******	0.2239
NOV 11,82	NOV 10,82	0.34	0.27	0.060	0.045	0.145	0.232	0.0759
NOV 12,82	NOV 11,82	0.22	0.14	0.045	0.050	0.090	0.300	0.0525
NOV 13,82	NOV 12,82	0.12	0.19	0.020	0.030	0.120	0.228	0.0372
NOV 20,82	NOV 19,82	0.13	0.13	0.020	0.020	0.030	0.094	0.0537
NOV 21,82	NOV 20,82	0.49	0.06	0.095	0.045	0.045	0.214	0.0347
NOV 22,82	NOV 21,82	******	******	******	******	******	******	U 0.0005
NOV 24,82	NOV 23,82	0.04	0.05	<T 0.005	<W 0.005	<W 0.005	0.114	0.0355
NOV 27,82	NOV 26,82	******	0.02	******	******	******	******	U 0.0005
NOV 29,82	NOV 28,82	0.09	0.08	0.015	0.015	0.020	0.162	0.0513
NOV 30,82	NOV 29,82	******	******	******	******	******	******	******
DEC 3,82	DEC 2,82	0.31	0.89	0.155	0.075	0.610	0.192	0.1072
DEC 4,82	DEC 3,82	0.06	0.22	0.025	0.015	0.100	0.156	0.0417
DEC 5,82	DEC 4,82	0.24	0.29	0.055	0.115	0.160	0.126	0.0724
DEC 6,82	DEC 5,82	0.09	0.12	0.015	<T 0.005	0.045	0.084	0.0302
DEC 7,82	DEC 6,82	******	******	******	******	******	******	******
DEC 9,82	DEC 8,82	******	******	******	******	******	******	******
DEC 10,82	DEC 9,82	******	******	******	******	******	******	******
DEC 12,82	DEC 11,82	******	******	******	******	******	******	******
DEC 13,82	DEC 12,82	******	******	******	******	******	******	******
DEC 15,82	DEC 14,82	******	0.47	******	******	******	******	0.1072
DEC 16,82	DEC 15,82	0.04	0.06	0.010	0.025	0.035	0.082	0.0295
DEC 17,82	DEC 16,82	******	******	******	******	******	******	******
DEC 19,82	DEC 18,82	U 2.00	0.79	U 0.500	0.090	0.210	0.920	0.0851

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02 PAGE : 7

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
DEC 20,82	DEC 19,82	800	900	****	****	2	20.5	2	17468	2	1	100	C	
DEC 21,82	DEC 20,82	900	1030	****	****	2	0.7	2	17471	2	1	****	EK	
DEC 22,82	DEC 21,82	1030	1400	****	****	2	0.3	2	17474	2	1	31	CE	N
DEC 24,82	DEC 23,82	800	900	****	****	1	4.7	2	17477	2	1	101	CD	
DEC 25,82	DEC 24,82	900	900	****	****	1	17.3	2	17480	2	1	108		
DEC 26,82	DEC 25,82	900	900	****	****	1	0.4	2	17483	2	1	358		N
DEC 28,82	DEC 27,82	800	800	****	****	1	7.1	2	17486	2	1	98	D	
DEC 30,82	DEC 29,82	800	800	****	****	2	****	*	17489	2	1	****	E	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02 PAGE : 8

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 20,82	DEC 19,82		1326.0	12.4	4.60	4.57	0.0480	0.70	0.25
DEC 21,82	DEC 20,82		******	******	******	******	******	******	******
DEC 22,82	DEC 21,82	U	6.0	******	******	******	******	******	******
DEC 24,82	DEC 23,82		306.0	36.0	4.13	4.16	0.1024	3.35	0.46
DEC 25,82	DEC 24,82		1199.0	15.6	4.43	4.59	0.0498	1.70	0.16
DEC 26,82	DEC 25,82		92.0	******	******	4.93	0.0356	1.30	0.15
DEC 28,82	DEC 27,82		447.0	12.9	4.77	4.74	0.0366	1.60	0.18
DEC 30,82	DEC 29,82		******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LONGWOODS/DAILY/AEROCHEM #02

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 20,82	DEC 19,82	0.02	0.04	0.005	0.010	0.005	0.126	0.0269
DEC 21,82	DEC 20,82	******	******	******	******	******	******	******
DEC 22,82	DEC 21,82	******	******	******	******	******	******	******
DEC 24,82	DEC 23,82	0.12	0.26	0.030	0.055	0.120	0.310	0.0692
DEC 25,82	DEC 24,82	0.11	0.46	0.040	0.200	0.310	0.168	0.0257
DEC 26,82	DEC 25,82	0.23	0.19	0.040	0.100	0.140	******	0.0117
DEC 28,82	DEC 27,82	0.35	0.14	0.075	0.035	0.070	0.092	0.0182
DEC 30,82	DEC 29,82	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/SES #01

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 14,82	JAN 13,82	800	800	****	****	2	4.6	2	18081	2	1	34	D	N
JAN 18,82	JAN 17,82	800	800	****	****	2	3.4	2	18082	2	1	24	C	N
JAN 23,82	JAN 22,82	800	800	****	****	3	16.4	2	18083	2	1	60	C	
JAN 30,82	JAN 29,82	800	800	****	****	2	15.1	2	18084	2	1	74	C	
FEB 1,82	JAN 31,82	800	800	****	****	2	17.3	2	18085	2	1	6	C	N
FEB 4,82	FEB 3,82	800	800	****	****	2	13.1	2	18086	2	1	16	C	N
FEB 6,82	FEB 5,82	800	930	****	****	2	5.1	2	18087	2	1	74	C	
FEB 9,82	FEB 8,82	800	800	****	****	2	3.2	2	18088	2	1	70		
FEB 14,82	FEB 13,82	800	800	****	****	2	3.6	2	18089	2	1	53	C	
FEB 19,82	FEB 18,82	800	800	****	****	3	5.3	2	18090	2	1	97		
FEB 21,82	FEB 20,82	800	800	****	****	1	2.4	2	18091	2	1	56		
MAR 5,82	MAR 4,82	800	800	****	****	3	15.3	2	18092	2	1	82	C	
MAR 9,82	MAR 8,82	800	800	****	****	2	3.1	2	18093	2	1	29	C	N
MAR 11,82	MAR 10,82	800	800	****	****	1	2.1	2	18094	2	1	34	C	N
MAR 12,82	MAR 11,82	800	800	****	****	1	3.4	2	18095	2	1	113	C	
MAR 13,82	MAR 12,82	800	800	****	****	1	4.8	2	18096	2	1	137	CD	N
MAR 17,82	MAR 16,82	800	800	****	****	1	10.1	2	18097	2	1	90	C	
MAR 26,82	MAR 25,82	800	1000	****	****	2	6.2	2	18098	2	1	64	C	
MAR 31,82	MAR 30,82	800	800	****	****	1	23.1	2	18099	2	1	103	C	JH
APR 3,82	APR 2,82	800	800	****	****	1	9.6	2	18100	2	1	100	C	
APR 6,82	APR 5,82	800	900	****	****	2	18.4	2	18101	2	1	1	F	N
APR 11,82	APR 10,82	800	800	****	****	2	6.3	2	18102	2	1	79	A	
APR 13,82	APR 12,82	800	800	****	****	1	****	2	18103	2	1	****	ACD	H
APR 17,82	APR 16,82	800	800	****	****	1	10.7	1	18104	2	1	109	AC	HH
APR 18,82	APR 17,82	800	800	****	****	1	0.5	2	18105	2	1	240	C	N
APR 20,82	APR 19,82	800	800	****	****	1	3.3	2	18106	2	1	134	AC	N
APR 21,82	APR 20,82	800	800	****	****	1	1.8	2	18107	2	1	161		NJ

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/SES #01 PAGE : 2

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 14,82	JAN 13,82	U 263.0	31.7	******	4.13	0.1038	1.00	1.05
JAN 18,82	JAN 17,82	U 136.0	28.2	******	4.85	******	2.25	1.16
JAN 23,82	JAN 22,82	1626.0	24.5	******	4.26	0.0898	2.15	0.34
JAN 30,82	JAN 29,82	1854.0	19.0	4.77	4.54	0.0726	U 1.40	0.58
FEB 1,82	JAN 31,82	U 185.0	******	******	4.25	******	3.00	0.56
FEB 4,82	FEB 3,82	U 350.0	30.2	4.32	4.22	U 0.1004	U 2.15	U 0.72
FEB 6,82	FEB 5,82	627.0	39.3	4.21	4.13	0.1196	2.10	1.14
FEB 9,82	FEB 8,82	368.0	46.1	4.08	3.99	0.1402	1.60	1.41
FEB 14,82	FEB 13,82	313.0	U 122.0	******	U 3.59	U 0.3180	U 5.35	U 3.60
FEB 19,82	FEB 18,82	848.0	U 78.0	3.74	3.74	0.2232	5.25	1.18
FEB 21,82	FEB 20,82	221.0	60.9	******	4.04	0.1520	6.20	1.51
MAR 5,82	MAR 4,82	2060.0	33.5	******	4.30	0.1092	3.75	0.51
MAR 9,82	MAR 8,82	U 152.0	******	******	4.17	******	1.75	1.45
MAR 11,82	MAR 10,82	U 119.0	******	******	3.64	******	U 15.80	U 2.89
MAR 12,82	MAR 11,82	633.0	39.8	4.08	4.13	0.1232	3.50	0.72
MAR 13,82	MAR 12,82	1084.0	49.2	3.93	4.00	0.1484	4.65	0.56
MAR 17,82	MAR 16,82	1503.0	40.7	4.19	4.24	0.1204	4.45	0.76
MAR 26,82	MAR 25,82	654.0	34.6	4.31	4.39	0.0688	4.95	0.95
MAR 31,82	MAR 30,82	3920.0	17.5	4.74	5.16	0.0394	2.60	0.35
APR 3,82	APR 2,82	1584.0	16.5	4.93	5.22	0.0462	2.90	0.37
APR 6,82	APR 5,82	U 36.0	******	******	U 7.06	0.0170	0.75	0.14
APR 11,82	APR 10,82	819.0	40.5	4.12	4.24	0.0966	4.50	0.77
APR 13,82	APR 12,82	176.0	******	******	U 6.50	U 0.0588	U 19.15	U 2.87
APR 17,82	APR 16,82	1921.0	30.3	******	U 6.51	0.0658	5.00	0.47
APR 18,82	APR 17,82	197.0	89.8	******	3.86	0.1974	11.80	1.25
APR 20,82	APR 19,82	730.0	53.5	4.03	4.28	0.1152	7.85	1.34
APR 21,82	APR 20,82	477.0	44.5	U 5.39	4.12	0.1126	3.90	0.68

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/SES #01 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L		CHLORIDE MG/L		MAGNESIM MG/L		POTASSIM MG/L		SODIUM MG/L		AMMONIUM AS N MG/L		FREE H+ LAB MG/L	
JAN 14,82	JAN 13,82	0.56		0.51		0.085		0.040		0.120		0.220		0.0741	
JAN 18,82	JAN 17,82	******		U 1.50		******		******		******		0.360		0.0141	
JAN 23,82	JAN 22,82	0.33		0.14		0.050		0.020		0.070		0.118		0.0550	
JAN 30,82	JAN 29,82	U 0.53		U 0.44		U 0.065		0.050		U 0.290		0.270		0.0288	
FEB 1,82	JAN 31,82	0.47		0.38		0.050		0.090		0.200		0.410		0.0562	
FEB 4,82	FEB 3,82	U 0.47		U 0.58		U 0.050		0.035		U 0.260		U 0.440		0.0603	
FEB 6,82	FEB 5,82	U 0.98		0.78		0.075		0.050		0.315		0.290		0.0741	
FEB 9,82	FEB 8,82	0.41		0.63		0.055		0.035		0.395		U 0.370		0.1023	
FEB 14,82	FEB 13,82	0.46		0.98		0.130		0.050		U 0.700		U 1.000		U 0.2570	
FEB 19,82	FEB 18,82	0.28		0.46		0.025		0.050		0.115		0.320		0.1820	
FEB 21,82	FEB 20,82	0.37		0.32		0.025		0.065		0.080		2.040		0.0912	
MAR 5,82	MAR 4,82	0.69		0.24		0.125		0.035		0.115		0.410		0.0501	
MAR 9,82	MAR 8,82	U 1.18		0.83		0.190		0.025		0.420		0.294		0.0676	
MAR 11,82	MAR 10,82	U 2.60		U 2.33		U 0.390		0.160		U 1.400		U 2.650		0.2291	
MAR 12,82	MAR 11,82	0.24		0.26		0.015		0.030		0.065		0.810		0.0741	
MAR 13,82	MAR 12,82	0.37		0.31		0.055		0.025		0.200		0.394		0.1000	
MAR 17,82	MAR 16,82	0.98		0.22		0.140		0.075		0.095		0.470		0.0575	
MAR 26,82	MAR 25,82	0.98		0.22		0.160		0.045		0.090		1.130		0.0407	
MAR 31,82	MAR 30,82	0.69		0.37		0.110		0.040		0.275		0.312		0.0069	
APR 3,82	APR 2,82	0.86		0.13		0.150		0.045		0.050		0.334		0.0060	
APR 6,82	APR 5,82	******		0.99		******		******		******		******		U 0.0001	
APR 11,82	APR 10,82	0.34		0.11		0.060		0.045		0.050		0.920		0.0575	
APR 13,82	APR 12,82	U 5.48		1.17		U 0.640		0.470		0.435		U 4.800		U 0.0003	
APR 17,82	APR 16,82	0.66		0.37		0.150		U 0.460		U 0.260		U 2.800		U 0.0003	
APR 18,82	APR 17,82	1.19		0.58		0.315		0.185		0.350		1.310		0.1380	
APR 20,82	APR 19,82	1.50		0.36		0.305		0.215		0.205		1.540		0.0525	
APR 21,82	APR 20,82	0.16		0.13		0.020		0.045		0.025		0.540		0.0759	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAY 8,82	MAY 7,82	800	800	****	****	1	4.6	1	18108	2	1	78	C	
MAY 20,82	MAY 19,82	800	800	****	****	1	1.7	1	18109	2	1	66	C	
MAY 27,82	MAY 26,82	800	800	****	****	1	1.4	1	18110	2	1	96		
MAY 28,82	MAY 27,82	800	800	****	****	1	****	1	18111	2	1	****		M
MAY 31,82	MAY 30,82	800	800	****	****	1	1.3	1	18112	2	1	73	B	
JUN 1,82	MAY 31,82	800	800	****	****	1	11.5	1	18113	2	1	101		
JUN 2,82	JUN 1,82	800	800	****	****	1	12.5	1	18114	2	1	95		
JUN 6,82	JUN 5,82	800	800	****	****	1	20.2	1	18115	2	1	99		
JUN 8,82	JUN 7,82	800	800	****	****	1	1.6	1	18116	2	1	79	CD	
JUN 13,82	JUN 12,82	900	900	****	****	1	4.0	1	18117	2	1	81	CD	T
JUN 16,82	JUN 15,82	800	800	****	****	1	30.0	1	18118	2	1	99		
JUN 20,82	JUN 19,82	900	900	****	****	1	13.8	1	18120	2	1	93	CD	
JUN 21,82	JUN 20,82	900	900	****	****	1	13.2	1	18122	2	1	91	AD	
JUN 22,82	JUN 21,82	900	900	****	****	1	2.4	1	18124	2	1	59	CD	
JUN 26,82	JUN 25,82	900	900	****	****	1	2.6	1	18128	2	1	93	AC	H
JUN 27,82	JUN 26,82	900	900	****	****	1	0.6	1	18129	2	1	31	CD	N
JUN 29,82	JUN 28,82	900	900	****	****	1	19.6	1	18130	2	1	66	L	T
JUL 4,82	JUL 3,82	900	900	****	****	1	2.0	1	18131	2	1	92	CD	
JUL 5,82	JUL 4,82	900	900	****	****	1	4.8	1	18132	2	1	105	CD	
JUL 11,82	JUL 10,82	900	900	****	****	1	1.0	1	18133	2	1	49	C	N
JUL 12,82	JUL 11,82	900	900	****	****	1	0.4	1	18134	2	1	66	AC	
JUL 18,82	JUL 17,82	900	900	****	****	1	2.2	1	18135	2	1	71	CD	
JUL 19,82	JUL 18,82	900	900	1800	1815	1	****	1	18136	2	1	****		
JUL 20,82	JUL 19,82	900	900	****	****	1	****	*	18137	2	1	****	E	
JUL 28,82	JUL 27,82	900	900	****	****	1	8.2	1	18138	2	1	99		
JUL 31,82	JUL 30,82	800	900	****	****	1	4.0	1	18139	2	1	86		
AUG 2,82	AUG 1,82	800	800	****	****	1	16.8	1	18140	2	1	103		
AUG 5,82	AUG 4,82	800	800	****	****	1	5.0	1	18141	2	1	90		
AUG 8,82	AUG 7,82	800	1200	****	****	1	31.0	1	18142	2	1	105		
AUG 9,82	AUG 8,82	1200	800	****	****	1	6.0	1	18143	2	1	95	C	
AUG 20,82	AUG 19,82	800	800	****	****	1	8.0	1	18144	2	1	95	C	
AUG 21,82	AUG 20,82	800	800	****	****	1	1.0	1	18145	2	1	76		
AUG 22,82	AUG 21,82	800	800	****	****	1	1.8	1	18146	2	1	89	CD	
AUG 25,82	AUG 24,82	800	1445	2230	200	1	19.6	1	18147	2	1	102	C	
AUG 30,82	AUG 29,82	800	800	****	****	1	****	1	18148	2	1	****	C	
SEP 3,82	SEP 2,82	800	800	****	****	1	3.0	1	18149	2	1	87	CD	
SEP 15,82	SEP 14,82	800	800	****	****	1	8.3	1	18150	2	1	92	AC	
SEP 18,82	SEP 17,82	800	800	****	****	1	8.0	1	18151	2	1	100	C	
SEP 22,82	SEP 21,82	800	800	****	****	1	3.3	1	18152	2	1	92		TC
SEP 23,82	SEP 22,82	800	800	****	****	1	14.4	1	18153	2	1	99	CD	JT

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01 PAGE : 2

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L	
MAY 8,82	MAY 7,82		232.0	20.5	4.50	4.75	0.0516		2.90		0.45	
MAY 20,82	MAY 19,82		72.0	******	******	3.42	0.4658	U	9.85		1.41	
MAY 27,82	MAY 26,82		87.0	******	******	3.63	0.2900		9.60		2.03	
MAY 28,82	MAY 27,82		3014.0	39.5	3.99	4.15	0.1062		3.55		0.39	
MAY 31,82	MAY 30,82		61.0	******	******	3.85	0.1944		9.30		1.78	
JUN 1,82	MAY 31,82		745.0	26.5	4.15	4.35	0.0740		2.45		0.26	
JUN 2,82	JUN 1,82		769.0	21.5	4.30	4.49	0.0608		2.00		0.24	
JUN 6,82	JUN 5,82		1293.0	12.0	4.50	4.72	0.0386		1.00		0.17	
JUN 8,82	JUN 7,82		82.0	******	******	3.40	0.4510		25.50	U	3.29	
JUN 13,82	JUN 12,82		209.0	66.5	3.96	3.83	0.1442		6.15		1.74	
JUN 16,82	JUN 15,82		1921.0	40.5	4.12	4.11	0.0886		4.75		0.49	
JUN 20,82	JUN 19,82		823.0	49.9	3.93	3.94	0.1234		4.65		0.55	
JUN 21,82	JUN 20,82		778.0	18.0	4.53	4.64	0.0372		1.45		0.23	
JUN 22,82	JUN 21,82		91.0	******	******	4.09	0.1024		4.45		0.94	
JUN 26,82	JUN 25,82		155.0	66.0	******	4.40	0.0908	U	11.50	U	2.50	
JUN 27,82	JUN 26,82	U	12.0	******	******	******	******		******		******	
JUN 29,82	JUN 28,82		840.0	60.5	3.86	3.69	0.1570		6.45		0.50	
JUL 4,82	JUL 3,82		118.0	104.0	******	3.66	0.2480		10.30		1.75	
JUL 5,82	JUL 4,82		324.0	41.2	4.02	4.05	0.1108		4.35		0.43	
JUL 11,82	JUL 10,82	U	32.0	******	******	3.28	0.5600		******		******	
JUL 12,82	JUL 11,82		17.0	******	******	4.09	0.1232		******		******	
JUL 18,82	JUL 17,82		101.0	******	******	4.49	0.0726	U	7.45	U	1.35	
JUL 19,82	JUL 18,82		62.0	******	******	4.68	0.0450		4.15		0.44	
JUL 20,82	JUL 19,82		******	******	******	******	******		******		******	
JUL 28,82	JUL 27,82		525.0	35.9	4.08	4.11	0.0858		3.35		0.67	
JUL 31,82	JUL 30,82		222.0	59.0	3.90	3.96	0.1274		8.10		1.24	
AUG 2,82	AUG 1,82		1118.0	25.1	4.22	4.37	0.0586		2.85		0.44	
AUG 5,82	AUG 4,82		290.0	19.8	4.35	4.46	0.0544		2.55		0.23	
AUG 8,82	AUG 7,82		2105.0	64.5	3.89	3.81	0.1682		6.45		0.58	
AUG 9,82	AUG 8,82		369.0	26.0	4.21	4.29	0.0682		3.10		0.23	
AUG 20,82	AUG 19,82		488.0	******	4.05	3.99	0.1458		7.30		0.72	
AUG 21,82	AUG 20,82		49.0	******	******	6.74	0.0336		0.75		0.16	
AUG 22,82	AUG 21,82		103.0	******	******	4.06	0.1272		5.55		0.83	
AUG 25,82	AUG 24,82		1290.0	33.6	4.18	4.11	0.1076		3.10		0.36	
AUG 30,82	AUG 29,82		355.0	30.6	4.25	4.23	0.0822		3.40		0.39	
SEP 3,82	SEP 2,82		169.0	25.0	******	4.88	0.0612	U	4.45		0.76	
SEP 15,82	SEP 14,82		493.0	25.5	******	4.29	0.0848		3.15		0.49	
SEP 18,82	SEP 17,82		517.0	26.0	4.30	4.26	0.0792		2.70		0.60	
SEP 22,82	SEP 21,82		196.0	52.0	3.85	3.80	0.1428		4.20		1.27	
SEP 23,82	SEP 22,82		917.0	37.2	4.19	3.92	0.1158		2.90		0.50	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAY 8,82	MAY 7,82	0.44	0.11	0.105	0.045	0.070	0.550	0.0178
MAY 20,82	MAY 19,82	******	0.46	******	******	******	******	0.3802
MAY 27,82	MAY 26,82	******	0.68	******	******	******	******	0.2344
MAY 28,82	MAY 27,82	0.05	0.04	0.005	<T 0.015	<T 0.010	0.184	0.0708
MAY 31,82	MAY 30,82	******	0.35	******	******	******	******	0.1413
JUN 1,82	MAY 31,82	0.06	0.02	0.010	<T 0.015	<T 0.010	0.174	0.0447
JUN 2,82	JUN 1,82	0.04	0.03	0.005	<T 0.015	<T 0.010	0.286	0.0324
JUN 6,82	JUN 5,82	0.07	<W 0.01	0.010	<T 0.005	<T 0.010	0.186	0.0191
JUN 8,82	JUN 7,82	******	0.75	******	******	******	2.950	0.3981
JUN 13,82	JUN 12,82	1.42	0.42	0.205	0.145	0.070	1.070	0.1479
JUN 16,82	JUN 15,82	0.37	0.11	0.080	0.160	0.045	0.700	0.0776
JUN 20,82	JUN 19,82	0.03	0.10	0.020	<T 0.015	0.015	0.460	0.1148
JUN 21,82	JUN 20,82	0.13	0.04	0.025	<T 0.015	0.030	0.294	0.0229
JUN 22,82	JUN 21,82	******	0.25	******	******	******	******	0.0813
JUN 26,82	JUN 25,82	U 2.45	0.60	U 0.625	0.340	U 0.125	U 2.500	0.0398
JUN 27,82	JUN 26,82	******	******	******	******	******	******	******
JUN 29,82	JUN 28,82	0.18	0.10	0.030	0.080	0.045	******	0.2042
JUL 4,82	JUL 3,82	******	0.53	******	******	******	1.080	0.2188
JUL 5,82	JUL 4,82	0.15	0.15	0.035	0.025	0.045	0.382	0.0891
JUL 11,82	JUL 10,82	******	******	******	******	******	******	0.5248
JUL 12,82	JUL 11,82	******	******	******	******	******	******	0.0813
JUL 18,82	JUL 17,82	******	U 1.02	******	******	******	1.100	0.0324
JUL 19,82	JUL 18,82	******	0.32	******	******	******	******	0.0209
JUL 20,82	JUL 19,82	******	******	******	******	******	******	******
JUL 28,82	JUL 27,82	0.43	0.07	0.070	0.020	<T 0.010	0.268	0.0776
JUL 31,82	JUL 30,82	1.30	0.27	0.290	0.125	0.035	1.020	0.1096
AUG 2,82	AUG 1,82	0.39	0.08	0.040	0.045	0.015	0.480	0.0427
AUG 5,82	AUG 4,82	0.26	0.24	0.030	0.075	0.100	0.384	0.0347
AUG 8,82	AUG 7,82	0.11	0.15	0.020	0.125	0.030	0.440	0.1549
AUG 9,82	AUG 8,82	0.11	0.11	0.015	0.060	0.025	0.352	0.0513
AUG 20,82	AUG 19,82	******	0.32	******	******	******	1.090	0.1023
AUG 21,82	AUG 20,82	******	0.23	******	******	******	******	0.0002
AUG 22,82	AUG 21,82	0.40	0.24	0.130	0.060	0.050	0.840	0.0871
AUG 25,82	AUG 24,82	0.07	0.08	0.020	<T 0.015	<T 0.010	0.382	0.0776
AUG 30,82	AUG 29,82	0.43	0.41	0.105	0.185	0.240	0.190	0.0589
SEP 3,82	SEP 2,82	0.84	U 0.49	0.175	U 0.230	U 0.235	U 1.070	0.0132
SEP 15,82	SEP 14,82	0.33	0.10	0.035	0.035	0.015	0.296	0.0513
SEP 18,82	SEP 17,82	0.53	0.15	0.110	0.060	0.050	0.118	0.0550
SEP 22,82	SEP 21,82	0.39	0.22	0.050	0.125	0.100	0.580	0.1585
SEP 23,82	SEP 22,82	0.04	0.07	<W 0.005	<W 0.005	<W 0.005	0.208	0.1202

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
SEP 24,82	SEP 23,82	800	800	****	****	1	2.9	1	18154	2	1	82	C	TC
SEP 25,82	SEP 24,82	800	800	****	****	1	20.0	1	18155	2	1	96	C	JT
SEP 27,82	SEP 26,82	800	800	****	****	1	24.6	1	18156	2	1	103	C	M
SEP 28,82	SEP 27,82	800	800	****	****	1	8.6	1	18157	2	1	86	AD	
OCT 8,82	OCT 7,82	800	800	****	****	1	6.7	1	18158	2	1	94	A	
OCT 11,82	OCT 10,82	800	800	****	****	1	3.8	1	18159	2	1	91		T
OCT 15,82	OCT 14,82	800	800	1230	1600	1	1.8	1	18160	2	1	72	C	
OCT 17,82	OCT 16,82	800	800	****	****	3	17.5	1	18161	2	1	78	AD	HM
NOV 1,82	OCT 31,82	800	800	****	****	1	4.7	1	18162	2	1	96		
NOV 2,82	NOV 1,82	800	800	****	****	1	25.0	1	18163	2	1	122		N
NOV 3,82	NOV 2,82	800	800	****	****	1	17.1	1	18164	2	1	104		
NOV 4,82	NOV 3,82	800	800	****	****	1	4.0	1	18165	2	1	87		
NOV 11,82	NOV 10,82	800	800	****	****	1	11.1	2	18166	2	1	98		
NOV 12,82	NOV 11,82	800	800	****	****	1	11.4	2	18167	2	1	95		
NOV 13,82	NOV 12,82	800	800	****	****	3	13.1	2	18168	2	1	87		
NOV 20,82	NOV 19,82	800	900	****	****	1	11.5	2	18169	2	1	105	C	
NOV 21,82	NOV 20,82	900	1000	****	****	1	20.1	2	18170	2	1	107		
NOV 22,82	NOV 21,82	1000	800	****	****	1	0.7	2	18171	2	1	91	CD	
NOV 24,82	NOV 23,82	800	800	****	****	3	14.1	2	18172	2	1	105		
NOV 27,82	NOV 26,82	800	800	900	1200	2	5.3	2	18173	2	1	7		N
NOV 29,82	NOV 28,82	800	800	****	****	1	13.6	2	18174	2	1	100		
DEC 3,82	DEC 2,82	800	800	****	****	1	2.9	2	18175	2	1	114	D	
DEC 4,82	DEC 3,82	800	800	2300	400	1	****	*	18176	2	1	****		
DEC 5,82	DEC 4,82	800	800	****	****	1	2.6	2	18177	2	1	117		
DEC 6,82	DEC 5,82	800	800	****	****	2	****	*	18178	2	1	****		
DEC 9,82	DEC 8,82	800	800	****	****	2	4.8	2	18179	2	1	****	EIK	
DEC 16,82	DEC 15,82	800	800	****	****	1	19.6	2	18180	2	1	103	C	
DEC 19,82	DEC 18,82	900	800	****	****	1	4.2	2	18181	2	1	102	C	
DEC 20,82	DEC 19,82	800	800	****	****	3	16.8	2	18182	2	1	76	C	
DEC 24,82	DEC 23,82	800	900	****	****	1	6.4	2	18183	2	1	119	C	
DEC 25,82	DEC 24,82	900	800	****	****	1	15.2	2	18184	2	1	112		
DEC 28,82	DEC 27,82	800	900	****	****	1	9.1	2	18185	2	1	122		N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
SEP 24,82	SEP 23,82	153.0	56.0	******		3.75	0.1586	5.80	0.78
SEP 25,82	SEP 24,82	1238.0	56.0	4.58		3.77	0.1522	5.00	0.91
SEP 27,82	SEP 26,82	1627.0	20.5	4.05		4.23	0.0674	1.50	0.21
SEP 28,82	SEP 27,82	477.0	24.9	4.35		4.18	0.0796	2.50	0.32
OCT 8,82	OCT 7,82	405.0	42.9	4.10		4.02	0.1268	5.70	0.43
OCT 11,82	OCT 10,82	224.0	85.0	3.78		3.65	0.2160	8.40	1.39
OCT 15,82	OCT 14,82	84.0	******	******	U	6.71	0.0312	3.50	0.79
OCT 17,82	OCT 16,82	882.0	3.0	5.93		6.05	0.0266	0.25	0.02
NOV 1,82	OCT 31,82	292.0	39.4	4.27		4.09	0.1088	4.10	0.69
NOV 2,82	NOV 1,82	1958.0	15.5	4.60		4.45	0.0532	1.50	0.19
NOV 3,82	NOV 2,82	1148.0	18.2	******		4.39	0.0636	1.60	0.26
NOV 4,82	NOV 3,82	225.0	******	******		3.96	0.1202	2.80	1.00
NOV 11,82	NOV 10,82	704.0	47.0	4.00		3.90	0.1354	3.85	0.94
NOV 12,82	NOV 11,82	697.0	23.0	4.33		4.24	0.0806	2.30	0.27
NOV 13,82	NOV 12,82	736.0	20.0	4.36		4.33	0.0716	2.10	0.23
NOV 20,82	NOV 19,82	777.0	26.0	4.21		4.15	0.0864	2.30	0.30
NOV 21,82	NOV 20,82	1387.0	24.0	4.30		4.19	0.0788	2.30	0.31
NOV 22,82	NOV 21,82	41.0	******	******		4.64	0.0554	******	******
NOV 24,82	NOV 23,82	954.0	17.5	4.45		4.42	0.0620	1.60	0.22
NOV 27,82	NOV 26,82	U 25.0	******	******		4.06	0.1050	4.55	0.42
NOV 29,82	NOV 28,82	878.0	31.0	4.19		4.19	0.0908	2.45	0.40
DEC 3,82	DEC 2,82	212.0	******	4.23		4.15	0.0812	3.10	0.26
DEC 4,82	DEC 3,82	564.0	20.5	4.39		4.36	0.0640	2.10	0.31
DEC 5,82	DEC 4,82	196.0	******	4.14		4.08	0.1020	2.90	0.34
DEC 6,82	DEC 5,82	785.0	14.5	4.56		4.51	0.0568	1.35	0.11
DEC 9,82	DEC 8,82	******	******	******		******	******	******	******
DEC 16,82	DEC 15,82	1296.0	13.5	4.44		4.44	0.0582	1.40	0.29
DEC 19,82	DEC 18,82	277.0	101.0	******		3.66	0.2608	7.00	2.18
DEC 20,82	DEC 19,82	826.0	18.2	******		4.44	0.0612	1.40	0.30
DEC 24,82	DEC 23,82	489.0	56.0	3.92		3.92	0.1484	5.00	0.86
DEC 25,82	DEC 24,82	1096.0	19.4	******		4.47	0.0540	1.80	0.16
DEC 28,82	DEC 27,82	713.0	21.8	4.37		4.43	0.0646	2.00	0.23

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MELBOURNE/DAILY/AEROCHEM #01

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 24,82	SEP 23,82	0.35	0.14	0.050	0.050	0.030	0.600	0.177A
SEP 25,82	SEP 24,82	0.16	0.16	0.025	0.060	0.060	0.840	0.1698
SEP 27,82	SEP 26,82	0.02	0.07	0.005	0.015	0.015	0.224	0.0589
SEP 28,82	SEP 27,82	0.06	0.10	0.010	0.050	0.060	0.470	0.0661
OCT 8,82	OCT 7,82	0.53	0.27	0.100	0.130	0.125	0.780	0.0955
OCT 11,82	OCT 10,82	0.65	0.39	0.100	0.185	0.180	1.240	0.2239
OCT 15,82	OCT 14,82	U 1.90	0.27	0.340	0.135	0.050	******	U 0.0002
OCT 17,82	OCT 16,82	0.23	0.03	0.025	0.020	<W 0.005	0.138	0.0009
NOV 1,82	OCT 31,82	0.33	0.25	0.050	0.050	0.110	0.640	0.0913
NOV 2,82	NOV 1,82	0.06	0.07	0.020	0.015	0.060	0.160	0.0355
NOV 3,82	NOV 2,82	0.07	0.07	0.015	0.030	0.050	0.240	0.0407
NOV 4,82	NOV 3,82	0.22	0.15	0.035	0.055	0.025	0.132	0.1096
NOV 11,82	NOV 10,82	0.99	0.38	0.080	0.055	0.205	0.346	0.1259
NOV 12,82	NOV 11,82	0.10	0.10	0.015	0.030	0.060	0.280	0.0575
NOV 13,82	NOV 12,82	0.13	0.27	0.035	0.035	0.200	0.252	0.0468
NOV 20,82	NOV 19,82	0.12	0.11	0.010	0.030	0.050	0.088	0.0708
NOV 21,82	NOV 20,82	0.09	0.04	0.005	0.010	0.030	0.198	0.0646
NOV 22,82	NOV 21,82	******	******	******	******	******	******	0.0229
NOV 24,82	NOV 23,82	0.04	0.06	<W 0.005	<T 0.005	0.010	0.164	0.0380
NOV 27,82	NOV 26,82	******	******	******	******	******	******	0.0871
NOV 29,82	NOV 28,82	0.04	0.11	0.005	0.020	0.025	0.208	0.0646
DEC 3,82	DEC 2,82	0.32	0.60	0.095	0.045	0.385	0.156	0.0708
DEC 4,82	DEC 3,82	0.15	0.22	0.045	U 0.180	U 0.150	0.242	0.0437
DEC 5,82	DEC 4,82	0.24	0.32	0.045	0.035	0.175	0.200	0.0832
DEC 6,82	DEC 5,82	0.02	0.12	0.010	U 0.010	0.040	0.088	0.0309
DEC 9,82	DEC 8,82	******	******	******	******	******	******	******
DEC 16,82	DEC 15,82	0.09	0.06	0.020	0.050	0.020	0.134	0.0363
DEC 19,82	DEC 18,82	0.42	0.66	0.065	0.290	0.240	0.940	0.2188
DEC 20,82	DEC 19,82	0.15	0.05	0.025	0.030	0.025	0.164	0.0363
DEC 24,82	DEC 23,82	0.31	0.49	0.065	0.105	0.325	0.510	0.1202
DEC 25,82	DEC 24,82	0.10	0.37	0.040	0.040	0.230	0.160	0.0339
DEC 28,82	DEC 27,82	0.10	0.15	0.020	0.035	0.110	0.160	0.0372

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/SES #03 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 3.82	JAN 2.82	800	800	****	****	3	1.1	2	18405	2	1	42	C	N
JAN 4.82	JAN 3.82	800	800	1300	800	1	8.3	2	18406	2	1	100	D	
JAN 5.82	JAN 4.82	800	800	****	****	2	7.9	2	18407	2	1	70	C	
JAN 6.82	JAN 5.82	800	800	****	****	2	****	2	18408	2	1	****	E	
JAN 7.82	JAN 6.82	800	800	****	****	2	****	2	18409	2	1	****	CD	
JAN 8.82	JAN 7.82	800	800	****	****	2	1.3	2	18410	2	1	56	CD	
JAN 9.82	JAN 8.82	800	800	800	800	2	2.4	2	18411	2	1	62	CD	C
JAN 10.82	JAN 9.82	800	800	800	800	2	3.7	2	18412	2	1	47	CD	NHCM
JAN 11.82	JAN 10.82	800	800	800	800	2	16.2	2	18413	2	1	57	CD	JCM
JAN 12.82	JAN 11.82	800	800	800	1900	2	11.3	2	18414	2	1	55	D	H
JAN 13.82	JAN 12.82	800	800	****	****	2	3.9	2	18415	2	1	37		N
JAN 14.82	JAN 13.82	800	800	****	****	2	2.5	2	18416	2	1	70		C
JAN 15.82	JAN 14.82	800	800	****	****	2	1.3	2	18417	2	1	50	C	
JAN 17.82	JAN 16.82	800	800	****	****	2	10.9	2	18418	2	1	59	CD	CM
JAN 18.82	JAN 17.82	800	800	****	****	2	****	2	18419	2	1	****	C	
JAN 20.82	JAN 19.82	800	800	****	****	2	2.3	2	18420	2	1	90	CD	
JAN 21.82	JAN 20.82	800	800	****	****	2	1.5	2	18421	2	1	50	C	H
JAN 24.82	JAN 23.82	800	800	****	****	3	1.7	2	18422	2	1	43	CD	N
JAN 25.82	JAN 24.82	800	800	800	1900	2	4.3	2	18423	2	1	44	CD	NHCM
JAN 26.82	JAN 25.82	800	800	****	****	2	****	2	18424	2	1	****	C	
JAN 27.82	JAN 26.82	800	800	****	****	2	****	2	18425	2	1	****	D	
JAN 28.82	JAN 27.82	800	800	****	****	2	1.3	2	18426	2	1	48	C	N
JAN 29.82	JAN 28.82	800	800	****	****	2	0.9	2	18427	2	1	56	C	
JAN 30.82	JAN 29.82	800	700	****	****	2	8.9	2	18428	2	1	94	C	
JAN 31.82	JAN 30.82	700	730	****	****	3	2.0	2	18429	2	1	111		
FEB 1.82	JAN 31.82	730	1100	****	****	3	17.7	2	18430	2	1	46	C	N
FEB 2.82	FEB 1.82	1100	730	****	****	2	****	2	18431	2	1	****	E	
FEB 3.82	FEB 2.82	730	700	****	****	2	****	2	18432	2	1	****	E	
FEB 4.82	FEB 3.82	700	1000	****	****	2	14.7	2	18433	2	1	41	C	N
FEB 5.82	FEB 4.82	1000	730	****	****	2	****	2	18434	2	1	****	E	
FEB 6.82	FEB 5.82	730	730	****	****	2	6.7	2	18435	2	1	94	C	
FEB 9.82	FEB 8.82	730	730	****	****	2	****	2	18436	2	1	****		
FEB 11.82	FEB 10.82	800	800	****	****	2	1.3	2	18437	2	1	49	D	N
FEB 14.82	FEB 13.82	800	800	****	****	2	2.3	2	18438	2	1	69	D	
FEB 19.82	FEB 18.82	800	800	****	****	3	4.3	2	18439	2	1	115	C	
FEB 21.82	FEB 20.82	800	800	****	****	2	3.3	2	18440	2	1	83	C	
FEB 23.82	FEB 22.82	800	800	****	****	2	0.4	2	18441	2	1	54	CD	
FEB 26.82	FEB 25.82	800	800	****	****	2	****	2	18442	2	1	****	E	
MAR 1.82	FEB 28.82	800	800	****	****	2	****	2	18443	2	1	****	C	
MAR 2.82	MAR 1.82	800	800	800	1400	2	1.7	2	18444	2	1	72	C	H

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/SES #03 PAGE : 2

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM		PH FIELD		PH LAB		TOTAL H+ TO PH4.3 MG/L	SULPHATE MG/L		NITRATE AS N MG/L
JAN 3,82	JAN 2,82	U	77.0	******		******		4.07		******	8.50	U	2.05
JAN 4,82	JAN 3,82		1374.0	28.3		******		4.23		0.1012	1.85		0.42
JAN 5,82	JAN 4,82		917.0	13.7		******	U	6.32	U	0.0404	2.00		0.39
JAN 6,82	JAN 5,82		11.0	******		******		******		******	******		******
JAN 7,82	JAN 6,82		36.0	******		******		4.64		******	4.20		1.62
JAN 8,82	JAN 7,82		120.0	******		******	U	7.31		******	1.20		0.63
JAN 9,82	JAN 8,82		247.0	47.5		******	U	7.32	U	0.0336	2.05		1.17
JAN 10,82	JAN 9,82	U	287.0	5.8		******	U	6.10	U	0.0396	0.60		0.05
JAN 11,82	JAN 10,82		1530.0	19.0	U	6.88	U	6.91	U	0.0380	0.85		0.13
JAN 12,82	JAN 11,82		1025.0	4.4	U	5.55	U	5.53	U	0.0328	0.30		0.01
JAN 13,82	JAN 12,82	U	240.0	26.0		******		******		0.1108	0.70		0.93
JAN 14,82	JAN 13,82		288.0	25.6		******		4.07		0.0968	0.70		0.77
JAN 15,82	JAN 14,82		108.0	******		******		4.04		******	1.40		1.64
JAN 17,82	JAN 16,82		1070.0	31.0	U	6.95	U	7.00	U	0.0410	1.55		0.72
JAN 18,82	JAN 17,82		17.0	******		******	U	6.98		******	******		******
JAN 20,82	JAN 19,82		341.0	24.0		******		4.26		0.0852	1.20		0.64
JAN 21,82	JAN 20,82		124.0	******		******	U	5.77		******	0.75		0.31
JAN 24,82	JAN 23,82	U	122.0	******		******	U	6.53		******	1.65	U	1.26
JAN 25,82	JAN 24,82	U	313.0	12.8		******	U	6.69	U	0.0386	0.85		0.17
JAN 26,82	JAN 25,82		100.0	******		******	U	6.16		******	0.85		0.23
JAN 27,82	JAN 26,82		30.0	******		******		4.65		******	******		******
JAN 28,82	JAN 27,82	U	103.0	******		******	U	6.92		******	2.30		1.47
JAN 29,82	JAN 28,82		83.0	******		******		4.05		******	4.55		1.79
JAN 30,82	JAN 29,82		1380.0	14.3		4.56		4.47		0.0718	3.35		0.42
JAN 31,82	JAN 30,82		367.0	21.6		4.37		4.27		0.0824	1.30		0.39
FEB 1,82	JAN 31,82	U	1337.0	10.6		4.79		4.69		0.0566	1.10		0.14
FEB 2,82	FEB 1,82		4.0	******		******		******		******	******		******
FEB 3,82	FEB 2,82		1.0	******		******		******		******	******		******
FEB 4,82	FEB 3,82	U	989.0	14.8		4.56		4.45		0.0686	0.80		0.33
FEB 5,82	FEB 4,82		1.0	******		******		******		******	******		******
FEB 6,82	FEB 5,82		1034.0	30.7		4.21		4.16		0.1070	0.80		0.80
FEB 9,82	FEB 8,82		331.0	30.0		******		4.18		0.1004	0.60		0.93
FEB 11,82	FEB 10,82	U	105.0	******		******		4.50		******	0.75		0.51
FEB 14,82	FEB 13,82		263.0	72.0		******		3.75		0.2034	1.05		2.11
FEB 19,82	FEB 18,82		816.0	38.6		4.12		4.15		0.1128	3.45		0.82
FEB 21,82	FEB 20,82		450.0	122.0		3.57		3.58		0.3132	11.20		2.26
FEB 23,82	FEB 22,82		36.0	******		******		4.24		******	3.65		0.58
FEB 26,82	FEB 25,82		9.0	******		******		******		******	******		******
MAR 1,82	FEB 28,82		87.0	******		******	U	6.29		******	2.20		1.35
MAR 2,82	MAR 1,82		202.0	42.5		******		4.61		******	6.00		1.66

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/SES #03 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 3,82	JAN 2,82	******	U 1.51	******	******	******	******	0.0851
JAN 4,82	JAN 3,82	0.05	0.16	0.005	0.030	0.030	0.236	0.0589
JAN 5,82	JAN 4,82	U 1.21	0.24	U 0.265	0.070	0.080	0.246	U 0.0005
JAN 6,82	JAN 5,82	******	******	******	******	******	******	******
JAN 7,82	JAN 6,82	******	0.53	******	******	******	******	0.0229
JAN 8,82	JAN 7,82	******	0.44	******	******	******	0.300	U 0.0000
JAN 9,82	JAN 8,82	U 4.20	U 1.75	U 1.100	0.200	U 0.850	0.198	U 0.0000
JAN 10,82	JAN 9,82	0.38	0.04	0.095	0.030	0.030	0.178	U 0.0008
JAN 11,82	JAN 10,82	U 1.98	0.99	U 0.345	0.150	U 0.510	0.072	U 0.0001
JAN 12,82	JAN 11,82	0.09	0.41	0.030	0.030	0.230	0.076	U 0.0030
JAN 13,82	JAN 12,82	0.33	0.50	0.030	0.060	0.120	0.038	******
JAN 14,82	JAN 13,82	0.06	0.32	0.015	0.010	0.050	0.148	0.0851
JAN 15,82	JAN 14,82	******	1.08	******	******	******	0.570	0.0912
JAN 17,82	JAN 16,82	U 3.20	U 1.24	U 0.875	0.220	0.480	0.154	U 0.0001
JAN 18,82	JAN 17,82	******	******	******	******	******	******	U 0.0001
JAN 20,82	JAN 19,82	0.42	0.32	0.030	0.040	0.100	0.082	0.0550
JAN 21,82	JAN 20,82	0.58	1.06	0.175	0.030	U 0.700	0.134	U 0.0017
JAN 24,82	JAN 23,82	******	U 1.59	******	******	******	0.160	U 0.0003
JAN 25,82	JAN 24,82	U 1.29	0.21	U 0.440	0.050	0.070	0.172	U 0.0002
JAN 26,82	JAN 25,82	******	0.22	******	******	******	0.386	U 0.0007
JAN 27,82	JAN 26,82	******	******	******	******	******	******	0.0224
JAN 28,82	JAN 27,82	******	U 1.52	******	******	******	0.294	U 0.0001
JAN 29,82	JAN 28,82	******	0.45	******	******	******	1.090	0.0891
JAN 30,82	JAN 29,82	0.03	0.20	<T 0.005	<T 0.005	0.055	0.042	0.0339
JAN 31,82	JAN 30,82	0.02	0.11	<T 0.005	0.015	0.030	0.130	0.0537
FEB 1,82	JAN 31,82	0.19	0.08	<T 0.005	0.010	0.030	0.078	0.0204
FEB 2,82	FEB 1,82	******	******	******	******	******	******	******
FEB 3,82	FEB 2,82	******	******	******	******	******	******	******
FEB 4,82	FEB 3,82	0.02	0.14	<T 0.005	0.010	0.015	0.096	0.0355
FEB 5,82	FEB 4,82	******	******	******	******	******	******	******
FEB 6,82	FEB 5,82	0.05	0.34	0.015	0.015	0.065	0.060	0.0692
FEB 9,82	FEB 8,82	0.04	0.19	0.005	0.025	0.145	0.098	0.0661
FEB 11,82	FEB 10,82	0.26	0.58	0.070	0.020	0.200	0.206	0.0316
FEB 14,82	FEB 13,82	0.21	0.74	0.040	0.045	0.225	0.200	0.1778
FEB 19,82	FEB 18,82	0.66	0.46	0.180	0.070	0.235	0.312	0.0708
FEB 21,82	FEB 20,82	0.35	0.45	0.020	0.060	0.105	2.020	0.2630
FEB 23,82	FEB 22,82	******	0.30	******	******	******	******	0.0575
FEB 26,82	FEB 25,82	******	******	******	******	******	******	******
MAR 1,82	FEB 28,82	******	0.59	******	******	******	0.640	U 0.0005
MAR 2,82	MAR 1,82	U 1.33	0.58	0.240	0.750	0.240	U 2.150	0.0245

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/SES #03

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAR 5,82	MAR 4,82	800	800	****	****	3	14.3	2	18445	2	1	18	C	N
MAR 7,82	MAR 6,82	800	800	****	****	2	1.3	2	18446	2	1	77	C	
MAR 8,82	MAR 7,82	800	800	****	****	2	****	2	18447	2	1	****	E	
MAR 9,82	MAR 8,82	800	800	****	****	2	5.9	2	18448	2	1	80	C	
MAR 10,82	MAR 9,82	800	800	****	****	3	****	2	18449	2	1	****	C	
MAR 11,82	MAR 10,82	800	800	****	****	3	5.3	2	18450	2	1	52	C	
MAR 12,82	MAR 11,82	800	800	****	****	1	1.1	2	18451	2	1	87	C	
MAR 15,82	MAR 14,82	800	800	****	****	1	5.9	2	18452	2	1	151		N
MAR 17,82	MAR 16,82	800	800	****	****	1	7.1	2	18453	2	1	114	CD	
MAR 19,82	MAR 18,82	800	800	****	****	1	****	2	18454	2	1	****	C	
MAR 21,82	MAR 20,82	800	800	****	****	1	0.9	2	18455	2	1	199	C	N
MAR 22,82	MAR 21,82	800	800	800	1400	3	1.3	2	18456	2	1	76	C	
MAR 26,82	MAR 25,82	800	800	****	****	2	10.3	2	18457	2	1	83	C	HM
MAR 27,82	MAR 26,82	800	800	****	****	2	1.3	2	18458	2	1	27	CD	N
MAR 31,82	MAR 30,82	800	800	****	****	1	17.3	2	18459	2	1	86	C	
APR 1,82	MAR 31,82	800	800	****	****	1	1.3	2	18460	2	1	175	C	N
APR 3,82	APR 2,82	800	800	****	****	1	8.3	2	18461	2	1	103		
APR 4,82	APR 3,82	800	800	****	****	2	8.5	2	18462	2	1	36	CD	NCM
APR 5,82	APR 4,82	800	800	****	****	1	5.3	2	18463	2	1	35	CD	NCM
APR 6,82	APR 5,82	800	800	****	****	2	3.7	2	18464	2	1	23	C	N
APR 11,82	APR 10,82	800	800	****	****	2	3.5	2	18465	2	1	81		
APR 12,82	APR 11,82	800	800	****	****	3	****	2	18466	2	1	****	CD	
APR 13,82	APR 12,82	800	800	****	****	1	0.9	2	18467	2	1	388	CD	N
APR 14,82	APR 13,82	800	800	****	****	1	4.1	2	18468	2	1	125	CD	NJ
APR 17,82	APR 16,82	800	800	****	****	1	16.5	2	18469	2	1	98		
APR 18,82	APR 17,82	800	800	****	****	1	0.9	2	18470	2	1	48	C	N
APR 20,82	APR 19,82	800	800	****	****	1	9.5	2	18471	2	1	108	AC	J
APR 22,82	APR 21,82	800	800	****	****	1	3.7	2	18472	2	1	148	C	NJ
APR 27,82	APR 26,82	800	800	****	****	1	4.9	2	18473	2	1	45	C	NJ

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/SES #03 PAGE : 5

REMOVAL DATE	EXPOSURE DATE		VOLUME ML		CONDUCT. UMHO/CM		PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
MAR 5.82	MAR 4.82	U	443.0		30.0		4.20		4.24		0.1030		2.40		0.54
MAR 7.82	MAR 6.82		165.0		******		******		4.03		******		2.65		1.39
MAR 8.82	MAR 7.82		10.0		******		******		******		******		******		******
MAR 9.82	MAR 8.82		775.0		34.6		4.13		4.14		0.1090		0.90		1.11
MAR 10.82	MAR 9.82		18.0		******		******		******		******		******		******
MAR 11.82	MAR 10.82		452.0	U	74.2		3.79		3.87		0.2078		5.30		1.53
MAR 12.82	MAR 11.82		157.0		******		******		4.08		******		7.00		1.20
MAR 15.82	MAR 14.82		1462.0		52.2		3.98		3.99		0.1518		4.85		0.62
MAR 17.82	MAR 16.82		1338.0		62.2		3.90		3.95		0.1824		4.30		1.34
MAR 19.82	MAR 18.82		35.0		******		******	U	2.96		******	U	53.00	U	14.40
MAR 21.82	MAR 20.82		295.0	U	270.0		******	U	3.35		0.6696	U	15.40	U	6.10
MAR 22.82	MAR 21.82		163.0		55.9		******		4.08		0.1192		6.85		1.20
MAR 26.82	MAR 25.82		1411.0		9.6	U	5.04	U	5.26	U	0.0264		1.85		0.35
MAR 27.82	MAR 26.82	U	58.0		******		******	U	7.38		0.0210		1.15		0.30
MAR 31.82	MAR 30.82		2458.0		17.4		4.58		4.75		0.0450		2.00		0.31
APR 1.82	MAR 31.82		373.0		27.8	U	6.29	U	6.65	U	0.0316		4.05		0.83
APR 3.82	APR 2.82		1410.0		13.4		4.83		4.92		0.0568		2.10		0.25
APR 4.82	APR 3.82	U	514.0		37.7	U	7.28	U	7.35	U	0.0340		1.70		0.44
APR 5.82	APR 4.82	U	311.0		38.6		******	U	7.51	U	0.0234		1.35		0.16
APR 6.82	APR 5.82	U	140.0		******		******	U	7.03		0.0226		0.85		0.24
APR 11.82	APR 10.82		468.0		36.1		4.17		4.32		0.0818		3.85		1.04
APR 12.82	APR 11.82		72.0		******		******	U	6.78	U	0.0300		4.15		0.43
APR 13.82	APR 12.82		573.0		58.2		4.03		4.27		0.1080		8.50		1.63
APR 14.82	APR 13.82		843.0	U	77.0	U	6.51	U	7.58		0.0634		5.65		0.65
APR 17.82	APR 16.82		2661.0		31.8		4.16		4.25		0.0886		4.05		0.55
APR 18.82	APR 17.82	U	72.0		******		******		3.92		0.1944		12.25		1.79
APR 20.82	APR 19.82		1697.0		30.5		3.84		4.46		0.0714		3.70		0.74
APR 22.82	APR 21.82		902.0		66.0	U	5.41		3.97		0.1462		7.05		1.11
APR 27.82	APR 26.82	U	369.0		44.8	U	3.89	U	5.89		0.0480		9.80		1.31

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/SES #03

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAR 5,82	MAR 4,82	0.33	0.20	0.075	0.055	0.065	0.302	0.0575
MAR 7,82	MAR 6,82	0.48	0.62	0.090	0.025	0.450	0.610	0.0933
MAR 8,82	MAR 7,82	******	******	******	******	******	******	******
MAR 9,82	MAR 8,82	0.45	0.51	0.080	0.025	0.200	0.136	0.0724
MAR 10,82	MAR 9,82	******	******	******	******	******	******	******
MAR 11,82	MAR 10,82	0.49	0.62	0.080	0.080	0.315	0.910	0.1349
MAR 12,82	MAR 11,82	0.80	0.64	0.090	0.300	0.440	1.560	0.0832
MAR 15,82	MAR 14,82	0.33	0.30	0.040	0.030	0.195	0.480	0.1023
MAR 17,82	MAR 16,82	0.52	0.22	0.090	0.035	0.040	0.590	0.1122
MAR 19,82	MAR 18,82	******	U 5.40	******	******	******	******	U 1.0965
MAR 21,82	MAR 20,82	U 1.88	U 1.13	0.305	0.165	0.260	U 2.300	U 0.4467
MAR 22,82	MAR 21,82	0.49	0.23	0.100	0.040	0.060	U 1.940	0.0932
MAR 26,82	MAR 25,82	0.31	0.22	0.040	0.045	0.090	0.430	U 0.0055
MAR 27,82	MAR 26,82	******	0.11	******	******	******	******	U 0.0000
MAR 31,82	MAR 30,82	0.40	0.19	0.070	0.030	0.125	0.210	0.0178
APR 1,82	MAR 31,82	U 1.52	0.39	0.200	0.110	0.125	U 1.440	U 0.0002
APR 3,82	APR 2,82	0.45	0.06	0.130	0.025	0.045	0.238	0.0120
APR 4,82	APR 3,82	U 4.14	0.15	U 1.000	0.160	0.050	0.062	U 0.0000
APR 5,82	APR 4,82	U 4.73	0.15	U 1.250	0.125	0.055	0.012	U 0.0000
APR 6,82	APR 5,82	U 1.37	0.58	U 0.380	0.110	0.380	0.220	U 0.0001
APR 11,82	APR 10,82	0.74	0.18	0.170	0.020	0.090	0.830	0.0479
APR 12,82	APR 11,82	******	0.18	******	******	******	******	U 0.0002
APR 13,82	APR 12,82	U 1.96	0.38	0.265	0.115	0.125	U 1.460	0.0537
APR 14,82	APR 13,82	0.55	U 5.51	0.095	1.350	0.265	U 8.850	U 0.0000
APR 17,82	APR 16,82	0.51	0.20	0.075	0.055	0.075	0.610	0.0562
APR 18,82	APR 17,82	******	0.82	******	******	******	******	0.1202
APR 20,82	APR 19,82	0.52	0.16	0.120	0.065	0.060	0.720	0.0347
APR 22,82	APR 21,82	0.39	0.30	0.055	0.070	0.065	1.300	0.1072
APR 27,82	APR 26,82	U 2.51	0.51	U 0.465	0.085	0.210	U 1.990	U 0.0013

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAY 8,82	MAY 7,82	800	800	****	****	1	4.6	1	18474	2	1	98	C	
MAY 19,82	MAY 18,82	800	800	****	****	1	0.4	1	18475	2	1	120	CD	N
MAY 20,82	MAY 19,82	800	800	****	****	1	3.2	1	18476	2	1	140	BCD	N
MAY 23,82	MAY 22,82	800	800	****	****	1	16.8	1	18477	2	1	95		
MAY 24,82	MAY 23,82	800	800	****	****	1	0.8	1	18478	2	1	48		N
MAY 27,82	MAY 26,82	800	800	****	****	1	3.3	1	18479	2	1	19	CD	N
MAY 28,82	MAY 27,82	800	800	****	****	1	24.6	1	18480	2	1	116	C	
MAY 29,82	MAY 28,82	800	800	****	****	1	5.2	1	18481	2	1	119	CD	
MAY 31,82	MAY 30,82	800	800	****	****	1	0.8	1	18482	2	1	44	D	N
JUN 2,82	JUN 1,82	800	800	****	****	1	7.3	1	18483	2	1	110	C	
JUN 5,82	JUN 4,82	800	800	****	****	1	2.8	1	18484	2	1	144	C	N
JUN 6,82	JUN 5,82	800	800	****	****	1	22.6	1	18485	2	1	88	C	
JUN 8,82	JUN 7,82	800	800	****	****	1	2.2	1	18486	2	1	65	C	
JUN 14,82	JUN 13,82	800	800	****	****	1	****	1	18487	2	1	****	E	
JUN 16,82	JUN 15,82	800	800	****	****	1	16.0	1	18488	2	1	148	CD	NT
JUN 19,82	JUN 18,82	800	800	****	****	1	10.4	1	18490	2	1	103	C	JT
JUN 20,82	JUN 19,82	800	800	****	****	1	7.0	1	18492	2	1	89	C	
JUN 22,82	JUN 21,82	800	800	****	****	1	4.4	1	18494	2	1	98	C	H
JUN 26,82	JUN 25,82	800	800	****	****	1	7.3	1	18495	2	1	99	AC	
JUN 29,82	JUN 28,82	800	800	****	****	1	14.8	1	18496	2	1	100	C	J
JUL 4,82	JUL 3,82	800	800	****	****	1	4.4	1	18497	2	1	101	AC	
JUL 12,82	JUL 11,82	800	800	****	****	1	****	1	18498	2	1	****		
JUL 18,82	JUL 17,82	800	800	900	1700	1	25.0	1	18499	2	1	119	ACD	
JUL 19,82	JUL 18,82	800	800	****	****	1	14.0	1	18500	2	1	103	C	JHC
JUL 28,82	JUL 27,82	800	800	****	****	1	30.0	1	18501	2	1	105	C	
JUL 31,82	JUL 30,82	800	800	****	****	1	3.1	1	18502	2	1	94	C	
AUG 3,82	AUG 2,82	800	800	****	****	1	18.0	1	18503	2	1	99	C	C
AUG 4,82	AUG 3,82	800	800	****	****	1	4.8	1	18504	2	1	94	C	
AUG 8,82	AUG 7,82	800	800	530	800	1	8.0	1	18505	2	1	98	C	
AUG 9,82	AUG 8,82	800	800	****	****	1	3.8	1	18506	2	1	****	ACG	T
AUG 20,82	AUG 19,82	800	800	****	****	1	17.0	1	18507	2	1	102	ACD	J
AUG 21,82	AUG 20,82	800	800	****	****	1	5.6	1	18508	2	1	94	ACD	JC
AUG 22,82	AUG 21,82	800	800	****	****	1	5.1	1	18509	2	1	89	C	
AUG 25,82	AUG 24,82	800	800	****	****	1	48.5	1	18510	2	1	110		
AUG 30,82	AUG 29,82	800	800	****	****	1	3.2	1	18511	2	1	78	ACD	
SEP 2,82	SEP 1,82	800	800	****	****	1	8.0	1	18512	2	1	83	B	HM
SEP 3,82	SEP 2,82	800	800	****	****	1	7.8	1	18513	2	1	78		
SEP 4,82	SEP 3,82	800	800	****	****	1	2.6	1	18514	2	1	87		CM
SEP 15,82	SEP 14,82	800	800	****	****	1	7.0	1	18515	2	1	100	CD	
SEP 16,82	SEP 15,82	800	800	****	****	1	2.0	1	18516	2	1	81	C	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAY 8,82	MAY 7,82	290.0	24.8	U 6.89	U 6.91	0.0362	2.70	0.80
MAY 19,82	MAY 18,82	31.0	******	******	U 3.93	U 0.2384	U 15.00	U 3.00
MAY 20,82	MAY 19,82	289.0	******	U 6.61	U 7.05	0.0308	4.85	0.97
MAY 23,82	MAY 22,82	1024.0	45.4	3.99	4.12	0.1124	4.75	0.56
MAY 24,82	MAY 23,82	U 25.0	******	******	U 3.45	U 0.4842	U 15.00	U 3.00
MAY 27,82	MAY 26,82	U 42.0	******	******	3.52	0.3640	13.65	3.09
MAY 28,82	MAY 27,82	1831.0	32.3	4.20	4.25	0.0854	3.60	0.40
MAY 29,82	MAY 28,82	398.0	23.8	4.34	4.34	0.0640	2.30	0.24
MAY 31,82	MAY 30,82	U 23.0	******	******	4.29	0.0932	******	******
JUN 2,82	JUN 1,82	518.0	69.9	3.77	3.75	0.2166	6.50	0.64
JUN 5,82	JUN 4,82	259.0	42.2	4.02	4.02	0.0988	4.15	0.66
JUN 6,82	JUN 5,82	1289.0	7.5	5.02	4.91	0.0298	0.65	0.13
JUN 8,82	JUN 7,82	92.0	******	******	3.83	0.1702	9.60	1.06
JUN 14,82	JUN 13,82	3.0	******	******	******	******	******	******
JUN 16,82	JUN 15,82	1523.0	27.5	4.29	4.16	0.0660	3.25	0.43
JUN 19,82	JUN 18,82	688.0	89.0	3.00	3.60	0.2118	7.90	1.74
JUN 20,82	JUN 19,82	403.0	36.3	4.08	4.07	0.0894	3.60	0.44
JUN 22,82	JUN 21,82	279.0	17.0	5.72	6.04	0.0240	3.10	0.55
JUN 26,82	JUN 25,82	465.0	38.7	4.38	4.56	0.0696	6.30	0.62
JUN 29,82	JUN 28,82	950.0	47.5	U 6.59	U 7.43	U 0.0722	6.90	0.38
JUL 4,82	JUL 3,82	285.0	70.6	3.78	3.79	0.1918	9.40	1.10
JUL 12,82	JUL 11,82	138.0	42.5	******	4.99	0.0542	6.30	0.72
JUL 18,82	JUL 17,82	1911.0	27.5	4.26	4.39	0.0608	3.15	0.37
JUL 19,82	JUL 18,82	931.0	31.5	4.23	U 5.19	0.0526	5.15	0.52
JUL 28,82	JUL 27,82	2021.0	54.5	******	3.96	0.1346	6.15	0.49
JUL 31,82	JUL 30,82	187.0	83.0	******	3.75	0.2280	9.60	1.62
AUG 3,82	AUG 2,82	1150.0	12.0	******	4.93	0.0256	0.65	0.19
AUG 4,82	AUG 3,82	292.0	41.0	******	4.16	0.0928	4.85	0.81
AUG 8,82	AUG 7,82	507.0	24.3	******	4.23	0.0590	1.90	0.29
AUG 9,82	AUG 8,82	202.0	68.0	******	3.78	0.1646	8.35	0.70
AUG 20,82	AUG 19,82	1120.0	27.1	4.53	4.93	0.0492	5.50	0.68
AUG 21,82	AUG 20,82	339.0	4.0	5.56	6.32	0.0214	0.20	0.04
AUG 22,82	AUG 21,82	293.0	39.2	4.08	4.08	0.1042	4.65	0.56
AUG 25,82	AUG 24,82	3436.0	25.2	4.25	4.28	0.0934	2.50	0.27
AUG 30,82	AUG 29,82	161.0	30.7	******	4.14	0.0762	3.60	0.56
SEP 2,82	SEP 1,82	426.0	23.0	U 6.25	U 6.32	U 0.0686	3.25	0.31
SEP 3,82	SEP 2,82	391.0	17.5	4.51	4.45	0.0528	2.50	0.33
SEP 4,82	SEP 3,82	146.0	5.2	******	6.35	0.0214	0.35	0.05
SEP 15,82	SEP 14,82	450.0	31.5	4.35	4.32	0.0866	4.70	0.68
SEP 16,82	SEP 15,82	105.0	******	******	5.32	0.0552	6.00	0.95

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAY 8,82	MAY 7,82	U 1.21	0.19	U 0.335	0.070	0.080	U 1.400	U 0.0001
MAY 19,82	MAY 18,82	******	U 1.60	******	******	******	******	U 0.1175
MAY 20,82	MAY 19,82	1.89	0.24	0.585	0.310	0.070	1.350	U 0.0001
MAY 23,82	MAY 22,82	0.38	0.08	0.075	0.055	0.030	0.430	0.0759
MAY 24,82	MAY 23,82	******	U 1.56	******	******	******	******	U 0.3548
MAY 27,82	MAY 26,82	******	0.77	******	******	******	******	0.3020
MAY 28,82	MAY 27,82	U 0.52	<W 0.01	U 0.075	U 0.150	<T 0.010	0.254	0.0562
MAY 29,82	MAY 28,82	0.08	<W 0.01	0.010	<T 0.005	<T 0.010	0.246	0.0457
MAY 31,82	MAY 30,82	******	******	******	******	******	******	0.0513
JUN 2,82	JUN 1,82	0.14	0.10	0.015	<T 0.010	0.025	0.354	0.1778
JUN 5,82	JUN 4,82	0.42	0.16	0.100	0.095	0.075	0.430	0.0955
JUN 6,82	JUN 5,82	0.07	<W 0.01	0.010	<W 0.005	<T 0.010	0.152	0.0123
JUN 8,82	JUN 7,82	0.88	0.35	0.120	0.175	0.265	******	0.1479
JUN 14,82	JUN 13,82	******	******	******	******	******	******	******
JUN 16,82	JUN 15,82	0.49	0.12	0.090	0.050	0.045	0.328	0.0692
JUN 19,82	JUN 18,82	0.60	0.32	0.125	0.050	0.035	0.990	0.2512
JUN 20,82	JUN 19,82	<W 0.01	0.08	0.005	<T 0.010	0.015	0.510	0.0851
JUN 22,82	JUN 21,82	0.88	0.13	0.135	0.055	0.045	0.920	0.0009
JUN 26,82	JUN 25,82	0.55	0.30	0.075	0.660	0.035	1.460	0.0275
JUN 29,82	JUN 28,82	0.26	0.16	U 0.065	U 0.935	0.045	U 4.800	U 0.0000
JUL 4,82	JUL 3,82	0.46	0.30	0.100	0.100	0.060	1.360	0.1622
JUL 12,82	JUL 11,82	U 1.28	0.30	U 0.285	0.240	0.070	******	0.0102
JUL 18,82	JUL 17,82	0.30	0.12	0.050	0.025	0.040	0.440	0.0407
JUL 19,82	JUL 18,82	0.36	0.16	0.110	0.715	0.075	U 1.250	U 0.0065
JUL 28,82	JUL 27,82	0.21	0.15	0.050	0.045	<T 0.010	0.630	0.1096
JUL 31,82	JUL 30,82	1.00	0.41	0.210	0.090	0.020	0.950	0.1778
AUG 3,82	AUG 2,82	0.14	0.04	0.025	0.105	<T 0.005	0.168	0.0117
AUG 4,82	AUG 3,82	0.81	0.19	0.165	<T 0.015	0.090	0.540	0.0692
AUG 8,82	AUG 7,82	0.10	0.12	0.035	0.055	0.100	0.100	0.0589
AUG 9,82	AUG 8,82	0.20	0.21	0.040	0.135	0.115	1.080	0.1660
AUG 20,82	AUG 19,82	1.00	0.11	0.160	0.080	0.030	1.210	0.0117
AUG 21,82	AUG 20,82	0.04	0.04	0.010	0.050	0.055	0.262	0.0005
AUG 22,82	AUG 21,82	0.26	0.10	0.080	0.045	0.015	0.650	0.0832
AUG 25,82	AUG 24,82	0.04	0.03	0.010	0.035	<T 0.010	0.250	0.0525
AUG 30,82	AUG 29,82	0.39	0.35	0.065	0.135	0.165	0.510	0.0724
SEP 2,82	SEP 1,82	U 1.87	0.20	0.195	U 1.350	0.030	0.730	U 0.0005
SEP 3,82	SEP 2,82	0.17	0.09	0.035	0.035	0.020	0.580	0.0355
SEP 4,82	SEP 3,82	0.17	0.05	0.030	0.030	0.015	0.338	0.0004
SEP 15,82	SEP 14,82	0.67	0.20	0.130	0.130	0.120	0.660	0.0479
SEP 16,82	SEP 15,82	******	0.53	******	******	******	0.230	0.0048

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
SEP 17,82	SEP 16,82	800	800	****	****	1	1.1	1	18517	2	1	73	CD	
SEP 18,82	SEP 17,82	800	800	****	****	1	17.5	1	18518	2	1	103	AC	
SEP 21,82	SEP 20,82	800	800	****	****	1	1.3	1	18519	2	1	56	CD	
SEP 22,82	SEP 21,82	800	800	****	****	1	2.4	1	18520	2	1	176	C	NT
SEP 23,82	SEP 22,82	800	800	****	****	1	20.1	1	18521	2	1	88	C	
SEP 24,82	SEP 23,82	800	800	****	****	1	1.8	1	18522	2	1	71	C	T
SEP 25,82	SEP 24,82	800	800	****	****	1	16.0	1	18523	2	1	97	CD	
SEP 26,82	SEP 25,82	800	800	****	****	1	1.9	1	18524	2	1	55	C	
SEP 27,82	SEP 26,82	800	800	****	****	1	16.0	1	18525	2	1	160	C	N
SEP 28,82	SEP 27,82	800	800	****	****	1	10.9	1	18526	2	1	93	C	H
OCT 7,82	OCT 6,82	800	800	****	****	1	1.0	1	18527	2	1	39	CD	N
OCT 8,82	OCT 7,82	800	800	****	****	1	12.2	1	18528	2	1	105	C	
OCT 11,82	OCT 10,82	800	800	****	****	1	9.4	1	18529	2	1	98	C	
OCT 15,82	OCT 14,82	800	800	****	****	1	6.1	1	18530	2	1	87	C	
OCT 16,82	OCT 15,82	800	800	****	****	1	1.0	1	18531	2	1	10	C	N
OCT 20,82	OCT 19,82	800	800	****	****	1	****	1	18532	2	1	****	C	
OCT 23,82	OCT 22,82	800	800	****	****	1	7.0	1	18533	2	1	****	G	N
OCT 30,82	OCT 29,82	800	800	****	****	1	1.8	1	18534	2	1	60	D	
NOV 2,82	NOV 1,82	800	800	****	****	1	15.6	1	18535	2	1	97	C	M
NOV 3,82	NOV 2,82	800	800	****	****	1	25.1	2	18536	2	1	95	C	
NOV 4,82	NOV 3,82	800	800	****	****	1	2.5	2	18537	2	1	70	C	
NOV 5,82	NOV 4,82	800	800	****	****	3	3.3	2	18538	2	1	109	C	
NOV 12,82	NOV 11,82	800	800	****	****	1	22.5	2	18539	2	1	104	C	
NOV 13,82	NOV 12,82	800	800	****	****	3	8.9	2	18540	2	1	100	C	
NOV 15,82	NOV 14,82	800	800	****	****	2	4.5	2	18541	2	1	****	EF	
NOV 20,82	NOV 19,82	800	800	****	****	1	6.5	2	18542	2	1	96	C	
NOV 21,82	NOV 20,82	800	800	800	800	1	20.3	2	18543	2	1	94	C	
NOV 22,82	NOV 21,82	800	800	800	1000	1	0.7	2	18544	2	1	129	C	N
NOV 24,82	NOV 23,82	800	800	****	****	3	19.0	2	18545	2	1	88	C	
NOV 27,82	NOV 26,82	800	800	****	****	2	5.5	2	18546	2	1	****	EFK	
NOV 29,82	NOV 28,82	800	800	****	****	1	12.9	2	18547	2	1	89	C	
NOV 30,82	NOV 29,82	800	800	****	****	1	2.3	2	18548	2	1	85	C	
DEC 4,82	DEC 3,82	800	800	****	****	1	10.5	2	18549	2	1	158		N
DEC 5,82	DEC 4,82	800	800	****	****	1	2.7	2	18550	2	1	154	C	N
DEC 6,82	DEC 5,82	800	800	****	****	1	18.7	2	18551	2	1	102		
DEC 7,82	DEC 6,82	800	800	900	1100	1	1.5	2	18552	2	1	141		N
DEC 10,82	DEC 9,82	800	800	****	****	1	3.5	2	18553	2	1	****	IKFE	
DEC 12,82	DEC 11,82	800	800	****	****	2	0.9	2	18554	2	1	****	FIKE	
DEC 15,82	DEC 14,82	800	800	****	****	1	****	2	18555	2	1	****		
DEC 16,82	DEC 15,82	800	800	****	****	1	18.9	2	18556	2	1	99		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB	TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L	NITRATE AS N MG/L
SEP 17,82	SEP 16,82		52.0	******	******	U	6.77	0.0404		1.05	0.19
SEP 18,82	SEP 17,82		1162.0	17.1	4.33		4.35	0.0618		1.85	0.41
SEP 21,82	SEP 20,82		47.0	******	******		4.52	0.0610		4.05	0.71
SEP 22,82	SEP 21,82		271.0	39.5	4.10		3.97	0.1060		3.20	1.02
SEP 23,82	SEP 22,82		1139.0	36.4	4.07		3.99	0.1042		3.50	0.44
SEP 24,82	SEP 23,82		83.0	******	******		3.84	0.1380		6.00	0.87
SEP 25,82	SEP 24,82		998.0	38.9	4.07		4.00	0.1132		3.85	0.50
SEP 26,82	SEP 25,82		68.0	******	******		3.96	0.1256		2.15	0.60
SEP 27,82	SEP 26,82		1647.0	17.9	4.40		4.39	0.0592		1.50	0.30
SEP 28,82	SEP 27,82		650.0	10.7	4.82		5.02	0.0332		1.40	0.18
OCT 7,82	OCT 6,82	U	25.0	******	******		3.64	0.2488	>	10.00	2.34
OCT 8,82	OCT 7,82		825.0	28.3	4.21		4.14	0.0922		3.40	0.28
OCT 11,82	OCT 10,82		594.0	32.0	4.15		4.09	0.0950		3.10	0.40
OCT 15,82	OCT 14,82		342.0	11.2	5.51		5.57	0.0336		2.00	0.33
OCT 16,82	OCT 15,82	U	7.0	******	******		******	******		******	******
OCT 20,82	OCT 19,82		24.0	******	******		6.28	0.0266		0.90	0.11
OCT 23,82	OCT 22,82	U	5.0	******	******		******	******		******	******
OCT 30,82	OCT 29,82		70.0	******	******	U	7.01	0.0260		3.25	0.37
NOV 2,82	NOV 1,82		977.0	23.0	******		4.31	0.0706		2.30	0.38
NOV 3,82	NOV 2,82		1534.0	18.5	******		4.39	0.0608		1.75	0.32
NOV 4,82	NOV 3,82		113.0	******	******		4.35	0.0672		2.20	0.73
NOV 5,82	NOV 4,82		231.0	******	******		4.35	0.0608		1.35	0.40
NOV 12,82	NOV 11,82		1503.0	22.4	******		4.26	0.0752		2.30	0.30
NOV 13,82	NOV 12,82		572.0	16.6	4.57		4.40	0.0536		1.75	0.17
NOV 15,82	NOV 14,82		******	******	******		******	******		******	******
NOV 20,82	NOV 19,82		400.0	27.0	4.24		4.11	0.0926		2.55	0.33
NOV 21,82	NOV 20,82		1231.0	20.0	4.39		4.30	0.0624		2.20	0.23
NOV 22,82	NOV 21,82		58.0	******	******	U	6.16	0.0344	U	2.75	0.25
NOV 24,82	NOV 23,82		1079.0	16.0	4.47		4.44	0.0466		1.35	0.20
NOV 27,82	NOV 26,82		******	******	******		******	******		******	******
NOV 29,82	NOV 28,82		738.0	32.0	4.17		4.09	0.1090		2.60	0.41
NOV 30,82	NOV 29,82		126.0	******	******		4.03	0.1244		5.75	1.03
DEC 4,82	DEC 3,82		1070.0	20.0	4.46		4.53	0.0494		2.05	0.32
DEC 5,82	DEC 4,82		267.0	******	4.17		4.24	0.0822		2.80	0.47
DEC 6,82	DEC 5,82		1223.0	11.5	4.66		4.72	0.0374		1.10	0.12
DEC 7,82	DEC 6,82		136.0	******	4.49		4.56	0.0494		2.40	0.58
DEC 10,82	DEC 9,82		******	******	******		******	******		******	******
DEC 12,82	DEC 11,82		******	******	******		******	******		******	******
DEC 15,82	DEC 14,82		11.0	******	******		******	******		******	******
DEC 16,82	DEC 15,82		1200.0	18.0	4.50		4.47	0.0588		1.40	0.22

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03 PAGE : 6

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 17,82	SEP 16,82	******	0.46	******	******	******	******	U 0.0002
SEP 18,82	SEP 17,82	0.15	0.11	0.040	0.045	0.080	0.290	0.0447
SEP 21,82	SEP 20,82	******	0.24	******	******	******	******	0.0302
SEP 22,82	SEP 21,82	0.41	0.18	0.040	0.060	0.060	0.480	0.1072
SEP 23,82	SEP 22,82	0.07	0.11	0.010	0.030	0.015	0.390	0.1023
SEP 24,82	SEP 23,82	******	0.24	******	******	******	1.010	0.1445
SEP 25,82	SEP 24,82	0.13	0.10	0.010	0.030	0.025	0.540	0.1000
SEP 26,82	SEP 25,82	0.42	0.16	0.055	0.045	0.090	******	0.1096
SEP 27,82	SEP 26,82	0.09	0.13	0.005	0.040	0.040	0.274	0.0407
SEP 28,82	SEP 27,82	0.05	0.16	0.015	0.045	0.080	0.560	0.0095
OCT 7,82	OCT 6,82	******	******	******	******	******	******	0.2291
OCT 8,82	OCT 7,82	0.02	0.17	0.020	0.075	0.065	0.364	0.0724
OCT 11,82	OCT 10,82	0.03	0.12	0.020	0.030	0.020	0.246	0.0813
OCT 15,82	OCT 14,82	0.54	0.13	0.095	0.060	0.020	0.480	0.0027
OCT 16,82	OCT 15,82	******	******	******	******	******	******	******
OCT 20,82	OCT 19,82	******	0.51	******	******	******	******	0.0005
OCT 23,82	OCT 22,82	******	******	******	******	******	******	******
OCT 30,82	OCT 29,82	******	0.29	******	******	******	0.420	U 0.0001
NOV 2,82	NOV 1,82	0.14	0.12	0.020	0.040	0.080	0.046	0.0490
NOV 3,82	NOV 2,82	0.13	0.13	0.030	0.050	0.075	0.156	0.0407
NOV 4,82	NOV 3,82	******	0.17	******	******	******	0.172	0.0447
NOV 5,82	NOV 4,82	******	0.07	******	******	******	0.236	0.0447
NOV 12,82	NOV 11,82	0.14	0.09	0.025	0.030	0.030	0.148	0.0550
NOV 13,82	NOV 12,82	0.10	0.13	0.015	0.020	0.120	0.210	0.0398
NOV 15,82	NOV 14,82	******	******	******	******	******	******	******
NOV 20,82	NOV 19,82	U 0.05	0.21	U 0.150	0.025	0.010	0.178	0.0776
NOV 21,82	NOV 20,82	0.06	0.16	<W 0.005	0.025	0.080	0.230	0.0501
NOV 22,82	NOV 21,82	******	0.91	******	******	******	******	U 0.0007
NOV 24,82	NOV 23,82	0.05	0.10	0.015	U 0.150	0.020	0.134	0.0363
NOV 27,82	NOV 26,82	******	******	******	******	******	******	******
NOV 29,82	NOV 28,82	0.04	0.17	<W 0.005	0.150	0.015	0.160	0.0813
NOV 30,82	NOV 29,82	0.37	0.64	0.075	0.310	0.380	U 1.150	0.0933
DEC 4,82	DEC 3,82	0.17	0.27	0.045	0.025	0.110	0.342	0.0295
DEC 5,82	DEC 4,82	0.20	0.27	0.045	0.015	0.130	0.288	0.0575
DEC 6,82	DEC 5,82	0.03	0.11	<T 0.005	<T 0.005	0.020	U 0.136	0.0191
DEC 7,82	DEC 6,82	0.28	0.18	0.060	0.035	0.050	0.710	0.0275
DEC 10,82	DEC 9,82	******	******	******	******	******	******	******
DEC 12,82	DEC 11,82	******	******	******	******	******	******	******
DEC 15,82	DEC 14,82	******	******	******	******	******	******	******
DEC 16,82	DEC 15,82	0.07	0.11	0.015	0.030	0.060	0.148	0.0339

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
DEC 17,82	DEC 16,82	800	800	****	****	1	2.6	2	18557	2	1	60		M
DEC 19,82	DEC 18,82	800	800	****	****	2	3.9	2	18558	2	1	59		MM
DEC 20,82	DEC 19,82	800	800	****	****	2	15.9	2	18559	2	1	64	C	
DEC 21,82	DEC 20,82	800	800	****	****	2	5.5	2	18560	2	1	24	C	NH
DEC 24,82	DEC 23,82	800	800	1000	800	1	7.1	2	18561	2	1	96	A	
DEC 25,82	DEC 24,82	800	800	800	800	1	21.7	2	18562	2	1	102		
DEC 26,82	DEC 25,82	800	800	****	****	1	1.9	2	18563	2	1	160	C	NJH
DEC 28,82	DEC 27,82	800	800	****	****	1	8.3	2	18564	2	1	108	C	
DEC 30,82	DEC 29,82	800	800	****	****	3	****	2	18565	2	1	****		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03 PAGE : 8

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 17,82	DEC 16,82	100.0	******	******	U 6.55	0.0244	1.20	0.16
DEC 19,82	DEC 18,82	148.0	******	******	U 5.56	U 0.0382	8.35	1.93
DEC 20,82	DEC 19,82	656.0	12.3	4.48	4.68	0.0454	0.60	0.35
DEC 21,82	DEC 20,82	U 86.0	******	******	5.21	0.0316	1.05	0.25
DEC 24,82	DEC 23,82	438.0	51.0	3.89	4.02	0.1366	4.70	0.80
DEC 25,82	DEC 24,82	1420.0	18.0	4.33	4.45	0.0624	1.65	0.18
DEC 26,82	DEC 25,82	195.0	******	U 5.60	U 6.19	0.0248	2.45	0.26
DEC 28,82	DEC 27,82	577.0	24.0	4.21	4.36	0.0690	2.25	0.30
DEC 30,82	DEC 29,82	12.0	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NORTH EASTHOPE/DAILY/AEROCHEM #03

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 17,82	DEC 16,82	0.65	0.18	0.160	0.070	0.140	0.500	U 0.0003
DEC 19,82	DEC 18,82	U 2.00	1.20	U 0.500	0.110	0.570	U 1.190	U 0.0028
DEC 20,82	DEC 19,82	0.14	0.05	0.040	0.020	0.030	0.092	0.0209
DEC 21,82	DEC 20,82	0.26	0.43	0.065	0.345	0.350	0.360	0.0062
DEC 24,82	DEC 23,82	0.21	0.39	0.040	0.100	0.180	0.680	0.0955
DEC 25,82	DEC 24,82	0.08	0.31	0.025	0.040	0.185	0.224	0.0355
DEC 26,82	DEC 25,82	0.63	U 0.99	U 0.065	U 0.490	U 0.915	U 0.530	U 0.0006
DEC 28,82	DEC 27,82	0.07	0.32	0.020	0.090	0.180	0.288	0.0437
DEC 30,82	DEC 29,82	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/SES #04 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 3.82	JAN 2.82	830	830	2400	430	2	0.5	2	18686	2	1	48	CD	N
JAN 4.82	JAN 3.82	830	530	2000	530	3	3.3	2	18687	2	1	93		
JAN 5.82	JAN 4.82	530	530	530	100	2	14.1	2	18688	2	1	****	CGE	
JAN 7.82	JAN 6.82	530	530	****	****	2	1.1	2	18689	2	1	36	C	N
JAN 10.82	JAN 9.82	800	1330	1400	1300	2	3.7	2	18690	2	1	48	CD	NHCM
JAN 11.82	JAN 10.82	1330	1330	1330	1300	2	6.5	2	18691	2	1	133	C	NM
JAN 12.82	JAN 11.82	1330	530	****	****	2	15.1	2	18692	2	1	50		
JAN 13.82	JAN 12.82	530	530	2400	530	2	1.9	2	18693	2	1	54		
JAN 14.82	JAN 13.82	530	530	****	****	2	****	*	18694	2	1	****	E	
JAN 15.82	JAN 14.82	530	530	****	****	2	1.1	2	18695	2	1	52	C	
JAN 16.82	JAN 15.82	530	830	****	****	2	1.9	2	18696	2	1	53	C	
JAN 17.82	JAN 16.82	830	1300	1300	1100	2	7.3	2	18697	2	1	19	C	NHM
JAN 18.82	JAN 17.82	1300	530	1300	1500	2	0.6	2	18698	2	1	25	C	N
JAN 20.82	JAN 19.82	530	530	1700	2000	2	1.8	2	18699	2	1	69	C	
JAN 21.82	JAN 20.82	530	530	2300	500	2	3.1	2	18700	2	1	8	D	N
JAN 23.82	JAN 22.32	530	1300	****	****	3	18.3	2	18701	2	1	56	C	
JAN 24.82	JAN 23.82	1300	1600	1300	1600	2	4.5	2	18702	2	1	15	C	N
JAN 26.82	JAN 25.82	530	530	2200	400	2	3.7	2	18703	2	1	29	C	NH
JAN 27.82	JAN 26.82	530	530	1500	1630	2	****	2	18704	2	1	****	C	
JAN 29.82	JAN 28.82	530	530	1300	1600	2	1.9	2	18705	2	1	17	C	N
JAN 30.82	JAN 29.82	530	830	2100	530	2	10.4	2	18706	2	1	78		
FEB 1.82	JAN 31.82	830	530	****	****	2	****	2	18707	2	1	****	C	M
FEB 2.82	FEB 1.82	530	530	****	****	2	10.6	2	18708	2	1	42	C	N
FEB 3.82	FEB 2.82	530	530	****	****	2	3.7	2	18709	2	1	43	C	N
FEB 4.82	FEB 3.82	530	530	800	1300	2	11.6	2	18710	2	1	36		N
FEB 6.82	FEB 5.82	530	530	****	****	2	7.1	2	18711	2	1	74	C	
FEB 9.82	FEB 8.82	530	530	2400	530	2	1.8	2	18712	2	1	71		
FEB 10.82	FEB 9.82	530	530	530	1500	2	1.3	2	18713	2	1	59	C	
FEB 13.82	FEB 12.82	530	830	2300	300	1	0.5	2	18714	2	1	64	C	
FEB 19.82	FEB 18.82	530	530	1200	530	3	6.3	2	18715	2	1	70	C	
FEB 20.82	FEB 19.82	530	1600	****	****	3	1.5	2	18716	2	1	56	C	
FEB 21.82	FEB 20.82	1600	1100	1600	700	3	1.0	2	18717	2	1	10	CD	N
FEB 24.82	FEB 23.82	530	530	****	****	2	1.1	2	18718	2	1	54	D	
MAR 2.82	MAR 1.82	530	530	700	1100	2	2.2	2	18719	2	1	34	C	NH
MAR 5.82	MAR 4.82	530	530	1030	1500	3	13.3	2	18720	2	1	54	CD	
MAR 6.82	MAR 5.82	530	830	530	1100	3	2.2	2	18721	2	1	37	C	N
MAR 9.82	MAR 8.82	530	530	2200	530	2	4.1	2	18722	2	1	38	C	N
MAR 11.82	MAR 10.82	530	530	****	****	3	4.3	2	18723	2	1	69	C	
MAR 12.82	MAR 11.82	530	530	****	****	3	1.9	2	18724	2	1	104	AC	
MAR 13.82	MAR 12.82	530	830	2200	600	1	8.3	2	18725	2	1	101		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/SES #04 PAGE : 2

REMOVAL DATE	EXPOSURE DATE		VOLUME ML		CONDUCT. UMHO/CM		PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L	
JAN 3,82	JAN 2,82	U	40.0		******		******		4.18		******		10.00		U 2.00	
JAN 4,82	JAN 3,82		504.0		40.3		******		4.12		0.1296		3.00		0.70	
JAN 5,82	JAN 4,82		******		******		******		******		******		******		******	
JAN 7,82	JAN 6,82	U	66.0		******		******	U	7.54		******		2.50		0.97	
JAN 10,82	JAN 9,82	U	292.0		56.0		******	U	7.14	U	0.0572		2.80		0.89	
JAN 11,82	JAN 10,82		1422.0		17.0	U	6.75	U	6.75	U	0.0348		1.05		0.10	
JAN 12,82	JAN 11,82		1251.0		27.0		******		4.21		******		0.85		0.83	
JAN 13,82	JAN 12,82		169.0		34.5		******		4.18		******		0.75		1.03	
JAN 14,82	JAN 13,82		******		******		******		******		******		******		******	
JAN 15,82	JAN 14,82		94.0		******		******		4.12		******		2.05		1.93	
JAN 16,82	JAN 15,82		167.0		37.0		******		4.20		******		1.75		1.26	
JAN 17,82	JAN 16,82	U	229.0		67.0		******	U	7.14	U	0.0464		3.25		0.81	
JAN 18,82	JAN 17,82	U	25.0		******		******	U	6.31		******		******		******	
JAN 20,82	JAN 19,82		206.0		******		******		4.26		0.0976	U	2.30	U	1.12	
JAN 21,82	JAN 20,82	U	43.0		******		******	U	6.47		******		1.10		0.28	
JAN 23,82	JAN 22,82		1686.0		21.5		4.46		4.34		0.0736		1.45		0.33	
JAN 24,82	JAN 23,82	U	118.0		2.5		******	U	6.77		******		2.50		0.42	
JAN 26,82	JAN 25,82	U	180.0		******		******	U	6.23		******		1.50		0.30	
JAN 27,82	JAN 26,82		15.0		******		******		******		******		******		******	
JAN 29,82	JAN 28,82	U	53.0		******		******	U	5.18		******	U	7.40	U	2.73	
JAN 30,82	JAN 29,82		1337.0		16.4		4.56		4.46		0.0734		0.55		0.43	
FEB 1,82	JAN 31,82		140.0	U	87.5		******	U	7.45		******	U	18.85		0.19	
FEB 2,82	FEB 1,82	U	747.0		12.9		4.72		4.62		0.0626		1.25		0.18	
FEB 3,82	FEB 2,82	U	265.0		34.8		******		4.20		0.1050		2.15		0.82	
FEB 4,82	FEB 3,82	U	699.0		11.5		4.71		4.64		0.0542		0.50		0.20	
FEB 6,82	FEB 5,82		867.0		30.0		4.33		4.17		0.1092		0.95		0.74	
FEB 9,82	FEB 8,82		210.0		******		******		4.08		******		0.75		1.22	
FEB 10,82	FEB 9,82		126.0		18.4		******		4.59		******		1.10		0.47	
FEB 13,82	FEB 12,82		53.0		******		******	U	3.48		******	U	7.80	U	5.50	
FEB 19,82	FEB 18,82		729.0		45.8		******		4.01		0.1354		3.45		0.75	
FEB 20,82	FEB 19,82		140.0		142.0		******		3.52		******		11.15		2.46	
FEB 21,82	FEB 20,82	U	17.0		******		******		******		******		******		******	
FEB 24,82	FEB 23,82		99.0		******		******		3.52		******		11.15		3.63	
MAR 2,82	MAR 1,82	U	123.0		******		******	U	6.99		******	U	11.70	U	3.02	
MAR 5,82	MAR 4,82		1194.0		31.5		******		4.35		0.0896		3.10		0.68	
MAR 6,82	MAR 5,82	U	137.0		******		******		4.29		******		3.25		1.81	
MAR 9,82	MAR 8,82	U	260.0		38.6		******		4.28		0.0940		2.05		1.45	
MAR 11,82	MAR 10,82		489.0	U	84.1		3.80		3.83		0.2248		6.05		1.82	
MAR 12,82	MAR 11,82		327.0		69.0		******		3.94		0.1696		6.35		1.52	
MAR 13,82	MAR 12,82		1375.0		53.5		3.97		3.98		0.1604		4.70		0.68	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/SES #04 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 3,82	JAN 2,82	******	U 1.50	******	******	******	******	0.0661
JAN 4,82	JAN 3,82	0.06	0.10	0.010	0.020	0.030	0.530	0.0759
JAN 5,82	JAN 4,82	******	******	******	******	******	******	******
JAN 7,82	JAN 6,82	******	U 1.19	******	******	******	******	U 0.0000
JAN 10,82	JAN 9,82	U 6.20	U 1.70	U 1.350	0.210	U 0.900	0.460	U 0.0001
JAN 11,82	JAN 10,82	U 1.38	U 1.48	U 0.410	0.070	U 0.780	0.072	U 0.0002
JAN 12,82	JAN 11,82	0.08	0.42	0.025	0.020	0.080	0.302	0.0617
JAN 13,82	JAN 12,82	0.42	0.72	0.035	0.050	0.200	0.086	0.0661
JAN 14,82	JAN 13,82	******	******	******	******	******	******	******
JAN 15,82	JAN 14,82	******	1.15	******	******	******	******	0.0759
JAN 16,82	JAN 15,82	0.59	0.86	0.100	0.040	0.610	0.344	0.0631
JAN 17,82	JAN 16,82	U 5.20	U 5.36	U 1.350	0.320	U 3.450	0.450	U 0.0001
JAN 18,82	JAN 17,82	******	******	******	******	******	******	U 0.0005
JAN 20,82	JAN 19,82	U 1.24	0.88	U 0.175	0.080	0.450	U 0.244	0.0550
JAN 21,82	JAN 20,82	******	1.15	******	******	******	******	U 0.0003
JAN 23,82	JAN 22,82	0.19	0.43	0.030	0.020	0.350	0.126	0.0457
JAN 24,82	JAN 23,82	******	U 2.12	******	******	******	0.196	U 0.0002
JAN 26,82	JAN 25,82	0.83	0.76	0.220	0.050	0.500	0.358	U 0.0006
JAN 27,82	JAN 26,82	******	******	******	******	******	******	******
JAN 29,82	JAN 28,82	******	U 3.38	******	******	******	******	U 0.0066
JAN 30,82	JAN 29,82	0.04	0.22	<T 0.005	0.005	0.105	0.090	0.0347
FEB 1,82	JAN 31,82	U 10.30	0.42	U 2.550	U 0.155	U 2.400	0.276	U 0.0000
FEB 2,82	FEB 1,82	0.24	0.15	0.045	0.015	0.090	0.128	0.0240
FEB 3,82	FEB 2,82	0.35	0.78	0.055	0.050	0.250	0.490	0.0631
FEB 4,82	FEB 3,82	0.02	0.04	<T 0.005	<T 0.005	0.010	0.076	0.0229
FEB 6,82	FEB 5,82	0.04	0.59	0.020	0.015	0.250	0.158	0.0676
FEB 9,82	FEB 8,82	0.17	0.41	0.040	0.025	0.330	0.114	0.0832
FEB 10,82	FEB 9,82	0.30	0.83	0.065	0.020	0.450	0.308	0.0257
FEB 13,82	FEB 12,82	******	U 2.80	******	******	******	******	U 0.3311
FEB 19,82	FEB 18,82	0.25	0.38	0.055	0.005	0.165	0.292	0.0977
FEB 20,82	FEB 19,82	0.43	0.89	0.075	0.045	0.350	1.840	0.3020
FEB 21,82	FEB 20,82	******	******	******	******	******	******	******
FEB 24,82	FEB 23,82	0.52	0.61	0.065	0.075	0.260	< 2.000	0.3020
MAR 2,82	MAR 1,82	U 9.27	U 3.83	U 1.250	0.120	U 2.650	U 2.000	U 0.0001
MAR 5,82	MAR 4,82	0.71	0.38	0.165	0.030	0.195	0.450	0.0447
MAR 6,82	MAR 5,82	U 1.42	U 1.46	0.265	0.050	U 0.965	0.840	0.0513
MAR 9,82	MAR 8,82	0.94	1.03	0.215	0.025	0.650	0.530	0.0525
MAR 11,82	MAR 10,82	0.80	0.77	0.155	0.050	0.395	0.920	0.1479
MAR 12,82	MAR 11,82	0.83	0.41	0.070	0.025	0.170	1.440	0.1148
MAR 13,82	MAR 12,82	0.30	0.31	0.045	0.020	0.175	0.490	0.1047

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/SES #04 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAR 17,82	MAR 16,82	530	530	1000	1630	1	8.4	2	18726	2	1	80	C	
MAR 18,82	MAR 17,82	530	530	530	700	1	0.7	2	18727	2	1	46	AC	N
MAR 21,82	MAR 20,82	830	830	1300	1700	1	****	2	18728	2	1	****	C	
MAR 22,82	MAR 21,82	830	530	2400	400	3	1.4	2	18729	2	1	47		N
MAR 26,82	MAR 25,82	530	630	1300	1900	3	5.3	2	18730	2	1	96	C	JHM
MAR 31,82	MAR 30,82	530	530	1800	200	1	27.0	2	18731	2	1	97	C	
APR 1,82	MAR 31,82	530	530	1300	1700	1	2.2	2	18732	2	1	133	CD	NJ
APR 4,82	APR 3,82	1130	830	****	****	2	****	2	18733	2	1	****	C	CM
APR 5,82	APR 4,82	830	530	830	2200	2	2.0	2	18734	2	1	35	C	N
APR 6,82	APR 5,82	530	530	****	****	1	6.0	2	18735	2	1	13	C	N
APR 11,82	APR 10,82	830	700	2100	700	2	3.3	2	18736	2	1	56		
APR 12,82	APR 11,82	700	530	****	****	2	1.5	2	18737	2	1	78		H
APR 13,82	APR 12,82	530	530	530	1000	1	1.8	2	18738	2	1	119		
APR 14,82	APR 13,82	530	530	****	****	1	3.4	2	18739	2	1	124	C	N
APR 17,82	APR 16,82	530	900	1800	900	1	16.6	2	18740	2	1	108	C	
APR 18,82	APR 17,82	900	800	900	1000	1	0.6	2	18741	2	1	67	C	
APR 20,82	APR 19,82	530	503	****	****	1	1.0	2	18742	2	1	136	C	N
APR 21,82	APR 20,82	530	900	****	****	3	13.9	2	18743	2	1	99	D	
APR 27,82	APR 26,82	530	530	****	****	1	1.3	2	18744	2	1	134	CD	NM

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/SES #04 PAGE : 5

REMOVAL DATE	EXPOSURE DATE		VOLUME ML		CONDUCT. UMHO/CM		PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
MAR 17.82	MAR 16,82		1110.0		49.9		4.08		4.05		0.1276		4.50		1.22
MAR 18.82	MAR 17,82	U	53.0		******		******		3.32		******		6.35		2.80
MAR 21.82	MAR 20,82		280.0	U	244.0		******	U	3.38		0.5604	U	16.00	U	5.90
MAR 22.82	MAR 21,82	U	109.0		******		******	U	3.73		0.2368	U	10.70		1.93
MAR 26.82	MAR 25,82		841.0		16.5	U	5.89	U	6.37	U	0.0278		2.10		0.33
MAR 31.82	MAR 30,82		4313.0		17.2		4.41		4.55		0.0476		2.75		0.42
APR 1.82	MAR 31,82		481.0		24.0	U	6.18	U	6.65	U	0.0300		3.70		0.81
APR 4.82	APR 3,82		417.0		38.2	U	7.20	U	7.50	U	0.0250		1.25		0.36
APR 5.82	APR 4,82	U	118.0	U	84.0		******	U	7.78	U	0.0326		2.75		0.60
APR 6.82	APR 5,82	U	134.0		******		******	U	7.08		0.0246		0.85		0.27
APR 11.82	APR 10,82		305.0		36.7		******	U	6.78	U	0.0304		3.95		1.24
APR 12.82	APR 11,82		193.0		33.8		******		4.60		0.0680		4.95		1.00
APR 13.82	APR 12,82		352.0		64.0		3.96		4.20		0.1318		9.30		1.73
APR 14.82	APR 13,82		696.0		26.8		4.41		4.68		0.0530		4.25		0.67
APR 17.82	APR 16,82		2949.0		32.7		4.17		4.32		0.0806		3.70		0.49
APR 18.82	APR 17,82		66.0		******		******		4.36		0.0842		12.75		1.30
APR 20.82	APR 19,82		224.0		50.0		******	U	7.09		0.0376		9.35		1.77
APR 21.82	APR 20,82		2273.0		49.2		4.29		4.13		0.1208		4.90		0.78
APR 27.82	APR 26,82		287.0	U	116.0		******	U	7.54		0.0390	U	13.40	U	2.66

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/SES #04 PAGE : 6

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAR 17,82	MAR 16,82	1.00	0.32	0.235	0.040	0.080	0.560	0.0891
MAR 18,82	MAR 17,82	******	0.28	******	******	******	******	0.4786
MAR 21,82	MAR 20,82	U 2.25	U 1.07	U 0.445	0.145	0.280	U 2.500	U 0.4169
MAR 22,82	MAR 21,82	******	0.38	******	******	******	U 2.550	U 0.1862
MAR 26,82	MAR 25,82	0.98	0.42	0.170	0.020	U 0.265	0.820	U 0.0004
MAR 31,82	MAR 30,82	0.65	0.38	0.075	0.025	0.145	0.274	0.0282
APR 1,82	MAR 31,82	U 1.16	0.29	0.175	0.085	0.080	U 1.280	U 0.0002
APR 4,82	APR 3,82	U 4.52	0.21	U 1.000	0.125	0.080	0.124	U 0.0000
APR 5,82	APR 4,82	******	U 1.51	******	******	******	******	U 0.0000
APR 6,82	APR 5,82	******	0.32	******	******	******	0.390	U 0.0001
APR 11,82	APR 10,82	U 2.01	U 1.54	U 0.715	0.020	U 1.100	0.790	U 0.0002
APR 12,82	APR 11,82	0.46	0.14	0.240	<T 0.015	0.050	U 1.730	0.0251
APR 13,82	APR 12,82	2.06	0.48	0.300	0.120	0.160	U 1.630	0.0631
APR 14,82	APR 13,82	0.70	0.13	0.075	0.040	0.035	1.070	0.0209
APR 17,82	APR 16,82	0.17	0.15	0.045	0.015	0.040	0.580	0.0479
APR 18,82	APR 17,82	******	0.52	******	******	******	******	0.0437
APR 20,82	APR 19,82	U 3.99	0.51	U 0.775	0.185	0.245	U 2.800	U 0.0001
APR 21,82	APR 20,82	0.26	0.17	0.045	0.035	0.030	0.760	0.0741
APR 27,82	APR 26,82	U 13.30	U 3.57	U 1.950	U 0.410	U 0.845	U 2.850	U 0.0000

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAY 8,82	MAY 7,82	530	1030	1830	1030	1	5.3	1	18745	2	1	74	A	J
MAY 19,82	MAY 18,82	530	530	100	500	1	1.4	1	18746	2	1	91	C	
MAY 20,82	MAY 19,82	530	530	1500	1900	1	5.3	1	18747	2	1	100	C	J
MAY 23,82	MAY 22,82	530	530	****	****	1	8.6	1	18748	2	1	94		
MAY 27,82	MAY 26,82	530	530	100	500	1	1.3	1	18749	2	1	48		N
MAY 28,82	MAY 27,82	530	530	2300	500	1	29.4	1	18750	2	1	107	A	T
MAY 29,82	MAY 28,82	530	530	1930	2100	1	21.3	1	18751	2	1	100		
JUN 1,82	MAY 31,82	530	530	1200	1300	1	4.7	1	18752	2	1	89		
JUN 2,82	JUN 1,82	530	530	1200	1600	1	7.6	1	18753	2	1	92		
JUN 5,82	JUN 4,82	530	1000	830	1000	1	2.8	1	18754	2	1	90		
JUN 6,82	JUN 5,82	1000	730	1000	300	1	22.2	1	18755	2	1	96		JC
JUN 16,82	JUN 15,82	530	530	1900	2300	*	17.5	1	18756	2	1	98		
JUN 19,82	JUN 18,82	530	530	1730	2030	1	9.4	1	18758	2	1	99	AD	
JUN 20,82	JUN 19,82	530	530	900	1400	1	11.7	1	18760	2	1	96	AC	J
JUN 21,82	JUN 20,32	530	530	1400	1600	1	11.2	1	18762	2	1	95	A	
JUN 26,82	JUN 25,82	530	530	1530	2200	1	7.9	1	18764	2	1	91	D	
JUN 29,82	JUN 28,82	530	530	230	530	1	16.9	1	18765	2	1	102	AC	
JUN 30,82	JUN 29,82	530	530	530	800	1	1.8	1	18766	2	1	64		
JUL 4,82	JUL 3,82	530	1100	2000	1100	1	2.5	1	18767	2	1	74		
JUL 12,82	JUL 11,82	530	530	****	****	1	4.6	1	18768	2	1	90		
JUL 18,82	JUL 17,82	530	530	900	1800	1	31.2	1	18769	2	1	100	A	
JUL 19,82	JUL 18,82	530	530	1630	1830	1	47.2	1	18770	2	1	95		
JUL 28,82	JUL 27,82	530	530	1500	300	1	32.2	1	18771	2	1	102		T
AUG 3,82	AUG 2,82	530	530	730	1100	1	14.8	1	18772	2	1	100	A	
AUG 4,82	AUG 3,82	530	530	1800	400	1	19.4	1	18773	2	1	103		
AUG 8,82	AUG 7,82	530	1130	300	1130	1	7.8	1	18774	2	1	96	C	
AUG 9,82	AUG 8,82	1130	530	1130	1400	1	5.4	1	18775	2	1	99		
AUG 19,82	AUG 18,82	830	830	****	****	1	15.3	1	18776	2	1	102	C	
AUG 21,82	AUG 20,82	830	830	2200	500	1	5.7	1	18777	2	1	87		JC
AUG 22,82	AUG 21,82	1100	530	1230	1600	1	4.9	1	18778	2	1	70	AC	
AUG 25,82	AUG 24,82	530	930	200	730	1	49.4	1	18779	2	1	105		
AUG 29,82	AUG 28,82	530	530	200	400	1	1.8	1	18780	2	1	40	CD	N
SEP 2,82	SEP 1,82	530	530	200	600	1	1.3	1	18781	2	1	92	D	T
SEP 3,82	SEP 2,82	530	530	****	****	1	8.3	1	18782	2	1	106		
SEP 15,82	SEP 14,82	530	530	1700	1830	1	26.6	1	18783	2	1	104		
SEP 16,82	SEP 15,82	530	530	200	300	1	1.1	1	18784	2	1	21	D	N
SEP 18,82	SEP 17,82	530	900	245	600	1	17.5	1	18785	2	1	****	ACG	
SEP 21,82	SEP 20,82	530	530	830	930	1	1.6	1	18786	2	1	65		
SEP 22,82	SEP 21,82	530	530	200	530	1	3.4	1	18787	2	1	79		
SEP 23,82	SEP 22,82	530	530	530	1230	1	17.0	1	18788	2	1	99		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04 PAGE : 2

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAY 8,82	MAY 7,82	254.0	12.2	5.92	6.38	0.0298	1.40	0.50
MAY 19,82	MAY 18,82	82.0	******	******	U 3.44	U 0.4840	U 21.75	U 3.45
MAY 20,82	MAY 19,82	342.0	U 20.8	U 5.47	U 6.34	0.0356	3.70	0.75
MAY 23,82	MAY 22,82	522.0	59.0	3.89	4.00	0.1460	5.90	0.73
MAY 27,82	MAY 26,82	U 40.0	******	******	3.65	0.2664	8.35	2.01
MAY 28,82	MAY 27,82	2034.0	43.6	3.93	U 3.95	0.1116	U 3.95	0.44
MAY 29,82	MAY 28,82	1378.0	22.8	4.26	4.26	0.0638	1.90	0.27
JUN 1,82	MAY 31,82	269.0	59.9	3.77	3.82	0.1528	5.35	0.49
JUN 2,82	JUN 1,82	450.0	27.4	4.14	4.21	0.0730	2.15	0.29
JUN 5,82	JUN 4,82	163.0	46.2	******	3.94	0.1170	3.60	0.64
JUN 6,82	JUN 5,82	1373.0	8.1	4.63	5.02	0.0260	0.60	0.11
JUN 16,82	JUN 15,82	1110.0	37.9	******	4.10	0.0848	4.10	0.51
JUN 19,82	JUN 18,82	602.0	37.1	4.32	4.57	0.0580	5.95	1.29
JUN 20,82	JUN 19,82	723.0	35.2	4.26	U 6.77	U 0.0570	6.20	0.97
JUN 21,82	JUN 20,82	686.0	18.6	4.40	4.42	0.0526	2.35	0.35
JUN 26,82	JUN 25,82	465.0	45.0	4.00	4.06	0.1126	5.00	0.42
JUN 29,82	JUN 28,82	1105.0	53.5	3.90	3.94	0.1424	6.10	0.51
JUN 30,82	JUN 29,82	74.0	******	******	4.36	0.0582	1.50	0.24
JUL 4,82	JUL 3,82	120.0	******	******	4.38	0.0680	3.90	0.64
JUL 12,82	JUL 11,82	266.0	52.0	3.89	3.95	0.1384	4.85	0.53
JUL 18,82	JUL 17,82	2008.0	31.5	4.13	4.24	0.0806	3.50	0.36
JUL 19,82	JUL 18,82	2897.0	39.4	4.06	4.12	0.0982	4.40	0.36
JUL 28,82	JUL 27,82	2109.0	45.3	******	3.94	0.1126	5.15	0.36
AUG 3,82	AUG 2,82	949.0	29.9	******	4.19	0.0716	2.65	0.55
AUG 4,82	AUG 3,82	1286.0	59.0	******	3.88	0.1430	6.45	0.98
AUG 8,82	AUG 7,82	484.0	27.9	******	4.19	0.0698	2.35	0.30
AUG 9,82	AUG 8,82	345.0	65.0	******	3.82	0.1618	7.45	0.63
AUG 19,82	AUG 18,82	1003.0	41.6	4.11	4.15	0.1030	6.30	0.66
AUG 21,82	AUG 20,82	320.0	3.6	5.55	6.24	0.0222	0.20	0.05
AUG 22,82	AUG 21,82	221.0	33.1	4.10	4.18	0.0964	4.15	0.52
AUG 25,82	AUG 24,82	3347.0	20.3	4.35	4.32	0.0606	1.90	0.23
AUG 29,82	AUG 28,82	U 47.0	******	******	6.61	0.0212	3.40	0.66
SEP 2,82	SEP 1,82	77.0	******	******	3.55	0.2740	> 10.00	1.57
SEP 3,82	SEP 2,82	565.0	16.7	4.49	4.55	0.0580	2.40	0.30
SEP 15,82	SEP 14,82	1775.0	17.5	4.46	4.51	0.0514	2.20	0.32
SEP 16,82	SEP 15,82	U 15.0	******	******	4.96	0.0518	******	******
SEP 18,82	SEP 17,82	903.0	20.6	******	4.32	0.0682	1.90	0.41
SEP 21,82	SEP 20,82	67.0	******	******	4.84	0.0560	5.70	0.97
SEP 22,82	SEP 21,82	174.0	33.2	******	4.11	0.0920	2.95	0.80
SEP 23,82	SEP 22,82	1081.0	39.8	4.05	4.03	0.1116	3.75	0.52

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIUM MG/L	POTASSIUM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAY 8,82	MAY 7,82	0.34	0.08	0.090	0.025	0.025	0.780	0.0004
MAY 19,82	MAY 18,82	******	U 0.98	******	******	******	U 3.250	U 0.3631
MAY 20,82	MAY 19,82	1.24	0.15	0.330	0.080	0.045	0.900	U 0.0005
MAY 23,82	MAY 22,82	0.30	0.12	0.070	0.035	0.025	0.630	0.1000
MAY 27,82	MAY 26,82	******	0.42	******	******	******	******	0.2239
MAY 28,82	MAY 27,82	0.07	0.02	0.010	<W 0.005	<T 0.010	0.330	U 0.1122
MAY 29,82	MAY 28,82	0.03	<W 0.01	<W 0.005	<T 0.005	<T 0.010	0.262	0.0550
JUN 1,82	MAY 31,82	0.12	0.08	0.015	<T 0.005	0.020	0.248	0.1514
JUN 2,82	JUN 1,82	0.07	<W 0.01	<W 0.005	<W 0.005	<T 0.010	0.192	0.0617
JUN 5,82	JUN 4,82	0.19	0.09	0.030	<W 0.005	0.015	0.248	0.1148
JUN 6,82	JUN 5,82	0.06	0.02	0.005	<W 0.005	<T 0.010	0.106	0.0095
JUN 16,82	JUN 15,82	0.51	0.15	0.095	0.060	0.045	0.420	0.0794
JUN 19,82	JUN 18,82	0.98	0.19	0.205	0.055	0.020	1.940	0.0269
JUN 20,82	JUN 19,82	U 0.86	0.31	U 0.145	U 0.445	0.075	U 2.750	U 0.0002
JUN 21,82	JUN 20,82	0.26	0.04	0.035	<T 0.015	<T 0.010	0.500	0.0380
JUN 26,82	JUN 25,82	0.23	0.12	0.050	<T 0.015	<T 0.005	0.460	0.0871
JUN 29,82	JUN 28,82	0.08	0.10	0.020	0.025	<T 0.005	0.640	0.1148
JUN 30,82	JUN 29,82	******	0.04	******	******	******	******	0.0437
JUL 4,82	JUL 3,82	******	0.16	******	******	******	0.750	0.0417
JUL 12,82	JUL 11,82	0.19	0.13	0.040	<T 0.015	0.030	0.274	0.1122
JUL 18,82	JUL 17,82	0.24	0.10	0.045	0.025	0.030	0.360	0.0575
JUL 19,82	JUL 18,82	0.17	0.10	0.035	<T 0.015	0.035	0.380	0.0759
JUL 28,82	JUL 27,82	0.14	0.03	0.035	0.020	<T 0.010	0.530	0.1148
AUG 3,82	AUG 2,82	0.42	0.04	0.075	0.040	<T 0.010	0.332	0.0646
AUG 4,82	AUG 3,82	0.60	0.10	0.105	0.060	0.020	0.910	0.1318
AUG 8,82	AUG 7,82	0.10	<W 0.01	0.035	<T 0.005	<T 0.010	0.146	0.0645
AUG 9,82	AUG 8,82	0.10	0.06	0.025	0.035	<T 0.010	0.910	0.1514
AUG 19,82	AUG 18,82	0.78	0.13	0.170	0.095	0.015	0.960	0.0709
AUG 21,82	AUG 20,82	0.04	0.04	0.010	0.015	0.015	0.276	0.0006
AUG 22,82	AUG 21,82	0.25	0.17	0.070	0.090	0.045	0.700	0.0661
AUG 25,82	AUG 24,82	0.04	0.03	0.005	<T 0.005	<T 0.010	0.192	0.0479
AUG 29,82	AUG 28,82	******	0.24	******	******	******	******	0.0002
SEP 2,82	SEP 1,82	******	0.40	******	******	******	0.960	0.2818
SEP 3,82	SEP 2,82	0.20	0.08	0.050	<T 0.010	<W 0.005	0.440	0.0282
SEP 15,82	SEP 14,82	0.34	0.12	0.060	0.005	0.010	0.340	0.0309
SEP 16,82	SEP 15,82	******	******	******	******	******	******	0.0110
SEP 18,82	SEP 17,82	0.16	0.08	0.030	0.025	0.015	0.328	0.0479
SEP 21,82	SEP 20,82	******	0.23	******	******	******	******	0.0145
SEP 22,82	SEP 21,82	0.22	0.26	0.035	0.165	0.220	0.540	0.0776
SEP 23,82	SEP 22,82	0.09	0.11	0.015	0.020	0.015	0.510	0.0933

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
SEP 25,82	SEP 24,82	530	530	****	****	1	14.5	1	18789	2	1	96		
SEP 26,82	SEP 25,82	530	530	530	1000	1	2.9	1	18790	2	1	83		
SEP 27,82	SEP 26,82	530	530	****	****	1	5.2	1	18791	2	1	95		
SEP 28,82	SEP 27,82	530	530	530	1730	1	9.1	1	18792	2	1	113		
OCT 7,82	OCT 6,82	530	530	200	400	1	2.7	1	18793	2	1	91	C	
OCT 8,82	OCT 7,82	530	530	1000	1700	1	10.6	1	18794	2	1	92		
OCT 11,82	OCT 10,82	530	530	2400	400	1	5.8	1	18795	2	1	90	C	
OCT 15,82	OCT 14,82	530	530	1500	1530	1	6.0	1	18796	2	1	87	C	J
OCT 16,82	OCT 15,82	530	1500	****	****	3	2.6	1	18797	2	1	67	C	
OCT 21,82	OCT 20,82	530	530	1200	1500	1	4.7	1	18798	2	1	79	CD	
OCT 30,82	OCT 29,82	530	530	1400	1545	1	1.3	1	18799	2	1	92	D	
NOV 1,82	OCT 31,82	530	800	1400	1600	1	1.9	1	18800	2	1	59		
NOV 2,82	NOV 1,82	530	530	2400	530	1	16.1	1	18801	2	1	74		
NOV 3,82	NOV 2,82	530	530	2000	200	1	21.2	1	18802	2	1	63	A	
NOV 4,82	NOV 3,82	530	530	****	****	1	2.8	1	18803	2	1	46	DF	N
NOV 5,82	NOV 4,82	530	530	****	****	3	5.4	1	18804	2	1	69	F	
NOV 11,82	NOV 10,82	530	530	2300	400	1	8.9	2	18805	2	1	101	F	
NOV 12,82	NOV 11,82	530	530	1000	2200	1	14.7	2	18806	2	1	106	F	
NOV 14,82	NOV 12,82	530	1100	****	****	3	12.2	2	18807	2	1	79		Z
NOV 15,82	NOV 14,82	1100	530	100	500	2	1.7	2	18808	2	1	21	CD	N
NOV 20,82	NOV 19,82	530	930	****	****	1	4.6	2	18809	2	1	92		HM
NOV 21,82	NOV 20,82	930	800	****	****	1	19.6	2	18810	2	1	95		
NOV 22,82	NOV 21,82	800	530	****	****	1	1.3	2	18811	2	1	110		
NOV 24,82	NOV 23,82	530	530	****	****	3	17.5	2	18812	2	1	94	CL	
NOV 27,82	NOV 26,82	530	830	1100	1500	3	4.4	2	18813	2	1	79	C	HM
NOV 29,82	NOV 28,82	1130	900	1300	1830	1	12.7	2	18814	2	1	93		
NOV 30,82	NOV 29,82	900	530	2300	200	1	1.8	2	18815	2	1	13		N
DEC 4,82	DEC 3,82	530	900	****	****	1	12.4	2	18816	2	1	102	CD	
DEC 6,82	DEC 5,82	1000	530	****	****	1	26.0	2	18817	2	1	96		
DEC 9,82	DEC 8,82	530	530	1900	2200	3	2.8	2	18818	2	1	55	CD	
DEC 16,82	DEC 15,82	530	530	****	****	1	18.5	2	18819	2	1	97		
DEC 17,82	DEC 16,82	530	530	****	****	1	1.6	2	18820	2	1	15		N
DEC 19,82	DEC 18,82	530	1100	1300	2200	2	3.5	2	18821	2	1	43	D	N
DEC 20,82	DEC 19,82	1100	530	930	1300	2	11.3	2	18822	2	1	88		
DEC 21,82	DEC 20,82	530	530	****	****	2	****	2	18823	2	1	****		
DEC 24,82	DEC 23,82	530	1100	1100	1900	3	10.6	2	18824	2	1	90		
DEC 25,82	DEC 24,82	1100	1200	****	****	1	15.6	2	18825	2	1	100		
DEC 26,82	DEC 25,82	1200	1100	****	****	1	10.7	2	18826	2	1	100		
DEC 28,82	DEC 27,82	830	830	****	****	1	8.0	2	18827	2	1	99		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04 PAGE : 5

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM		PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
SEP 25,82	SEP 24,82		901.0	41.5		4.03		3.99		0.1204		3.95		0.57
SEP 26,82	SEP 25,82		155.0	45.4		******		3.94		0.1294		4.30		0.59
SEP 27,82	SEP 26,82		320.0	17.6		4.35		4.35		0.0564		1.10		0.36
SEP 28,82	SEP 27,82		662.0	14.6		4.49		4.52		0.0508		1.55		0.21
OCT 7,82	OCT 6,82		159.0	******		******		3.61		0.2540		10.20		1.33
OCT 8,82	OCT 7,82		628.0	31.0		4.13		4.08		0.0978		3.85		0.29
OCT 11,82	OCT 10,82		338.0	42.0		4.00		3.96		0.1234		4.20		0.57
OCT 15,82	OCT 14,82		336.0	10.6		5.31		5.79		0.0366		1.85		0.33
OCT 16,82	OCT 15,82		113.0	******		******		6.30		0.0236		0.55	<T	0.02
OCT 21,82	OCT 20,82		239.0	******		4.64		4.65		0.0508		2.65		0.25
OCT 30,82	OCT 29,82		77.0	******		******	U	7.03		0.0256		3.75		0.44
NOV 1,82	OCT 31,82		72.0	******		******		4.12		0.1110		6.30		0.91
NOV 2,82	NOV 1,82		765.0	28.5		******		4.19		0.0838		3.15		0.53
NOV 3,82	NOV 2,82		861.0	19.1		******		4.39		0.0584		2.00		0.37
NOV 4,82	NOV 3,82	U	83.0	******		******		4.42		0.0640		2.20		0.87
NOV 5,82	NOV 4,82		242.0	16.4		******		4.43		0.0556		1.35		0.34
NOV 11,82	NOV 10,82		577.0	25.4		******		4.23		0.0794		2.75		0.39
NOV 12,82	NOV 11,82		1007.0	20.0		******		4.31		0.0690		2.00		0.25
NOV 14,82	NOV 12,82		624.0	15.4		4.50		4.44		0.0496		1.65		0.17
NOV 15,82	NOV 14,82	U	23.0	******		******		4.17		0.0742		******		******
NOV 20,82	NOV 19,82		272.0	******		4.15		4.09		0.0958		3.25	U	1.16
NOV 21,82	NOV 20,82		1203.0	19.0		4.49		4.35		0.0580		1.95		0.18
NOV 22,82	NOV 21,82		92.0	******		******		4.28		0.0636		2.50		0.32
NOV 24,82	NOV 23,82		1064.0	14.5	U	4.58		4.47		0.0492		1.30		0.19
NOV 27,82	NOV 26,82		225.0	******	U	5.62	U	6.00	U	0.0236		0.40		0.12
NOV 29,82	NOV 28,82		765.0	31.5		4.20		4.14		0.0998		2.75		0.36
NOV 30,82	NOV 29,82	U	16.0	******		******		4.59		0.0552		******		******
DEC 4,82	DEC 3,82		814.0	21.5		4.43		4.41		0.0574		2.10		0.32
DEC 6,82	DEC 5,82		1600.0	12.6		4.67		4.69		0.0380		1.15		0.10
DEC 9,82	DEC 8,82		99.0	******		******		4.41		0.0684		2.15		0.52
DEC 16,82	DEC 15,82		1158.0	13.0		4.89		4.77		0.0412		1.65		0.19
DEC 17,82	DEC 16,82	U	16.0	******		******		4.55		0.0596		******		******
DEC 19,82	DEC 18,82	U	98.0	******		******		4.09		0.1254		4.05		1.17
DEC 20,82	DEC 19,82		638.0	14.8		4.40		4.58		0.0486		0.70		0.37
DEC 21,82	DEC 20,82		142.0	******		******		4.43		0.0590		0.75		0.50
DEC 24,82	DEC 23,82		613.0	34.5		4.03		4.18		0.0970		2.90		0.45
DEC 25,82	DEC 24,82		1001.0	15.7		4.36		4.59		0.0510		1.30		0.14
DEC 26,82	DEC 25,82		691.0	13.5		4.54		4.74		0.0452		1.85		0.20
DEC 28,82	DEC 27,82		509.0	20.8		4.29		4.47		0.0622		2.05		0.22

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WELLESLEY/DAILY/AEROCHEM #04

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 25,82	SEP 24,82	0.09	0.10	0.005	0.020	0.015	0.480	0.1023
SEP 26,82	SEP 25,82	0.06	0.14	0.010	0.020	0.025	0.550	0.1148
SEP 27,82	SEP 26,82	0.05	0.12	0.005	0.005	0.010	0.142	0.0447
SEP 28,82	SEP 27,82	0.04	0.08	0.005	0.045	0.090	0.368	0.0302
OCT 7,82	OCT 6,82	******	0.39	******	******	******	0.700	0.2455
OCT 8,82	OCT 7,82	0.21	0.12	0.020	0.015	0.015	0.398	0.0832
OCT 11,82	OCT 10,82	0.18	0.16	0.030	0.030	0.020	0.354	0.1096
OCT 15,82	OCT 14,82	0.50	0.10	0.125	0.060	0.010	0.470	0.0016
OCT 16,82	OCT 15,82	0.05	0.06	0.030	0.010	0.015	0.322	0.0005
OCT 21,82	OCT 20,82	0.47	0.22	0.100	0.045	0.160	0.310	0.0224
OCT 30,82	OCT 29,82	******	0.25	******	******	******	U 1.380	U 0.0001
NOV 1,82	OCT 31,82	******	0.34	******	******	******	0.360	0.0759
NOV 2,82	NOV 1,82	0.14	0.17	0.020	0.030	0.040	0.680	0.0646
NOV 3,82	NOV 2,82	0.15	0.11	0.030	0.035	0.040	0.420	0.0407
NOV 4,82	NOV 3,82	******	0.14	******	******	******	U 1.120	0.0380
NOV 5,82	NOV 4,82	0.11	0.05	0.015	0.015	0.010	0.400	0.0372
NOV 11,82	NOV 10,82	0.17	0.16	0.035	0.025	0.085	0.312	0.0589
NOV 12,82	NOV 11,82	0.13	0.07	0.010	0.020	0.050	0.206	0.0490
NOV 14,82	NOV 12,82	0.17	0.13	0.015	0.020	0.110	0.194	0.0363
NOV 15,82	NOV 14,82	******	******	******	******	******	******	0.0676
NOV 20,82	NOV 19,82	0.14	0.22	0.040	0.020	U 0.125	0.264	0.0813
NOV 21,82	NOV 20,82	0.02	0.11	<W 0.005	<W 0.005	0.010	0.150	0.0447
NOV 22,82	NOV 21,82	0.09	0.10	0.020	0.015	0.015	0.314	0.0525
NOV 24,82	NOV 23,82	0.03	0.06	<W 0.005	<W 0.005	<W 0.005	0.126	0.0339
NOV 27,82	NOV 26,82	0.34	0.08	U 0.900	<W 0.005	<T 0.005	0.046	U 0.0010
NOV 29,82	NOV 28,82	0.05	0.15	0.015	<W 0.005	0.010	0.162	0.0724
NOV 30,82	NOV 29,82	******	******	******	******	******	******	0.0257
DEC 4,82	DEC 3,82	0.15	0.23	0.040	<T 0.005	0.080	0.264	0.0389
DEC 6,82	DEC 5,82	0.03	0.10	<T 0.005	<T 0.005	0.025	0.102	0.0204
DEC 9,82	DEC 8,82	******	0.16	******	******	******	0.540	0.0389
DEC 16,82	DEC 15,82	<W 0.01	0.03	0.010	0.005	<W 0.005	0.440	0.0170
DEC 17,82	DEC 16,82	******	******	******	******	******	******	0.0282
DEC 19,82	DEC 18,82	******	0.45	******	******	******	0.510	0.0813
DEC 20,82	DEC 19,82	0.03	0.06	<W 0.005	0.015	0.010	0.158	0.0263
DEC 21,82	DEC 20,82	0.06	0.11	0.010	0.010	0.055	0.166	0.0372
DEC 24,82	DEC 23,82	0.06	0.17	0.015	0.020	0.055	0.292	0.0661
DEC 25,82	DEC 24,82	0.06	0.22	0.020	0.015	0.100	0.118	0.0257
DEC 26,82	DEC 25,82	0.39	0.18	0.030	0.030	0.145	0.240	0.0182
DEC 28,82	DEC 27,82	0.06	0.14	0.020	0.020	0.080	0.204	0.0339

PART IV

CENTRAL REGION

DAILY PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/SES #06 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 4.82	JAN 3.82	830	745	200	745	1	3.3	2	28379	2	1	93		
JAN 5.82	JAN 4.82	745	750	1800	2330	2	6.4	2	28380	2	1	74	C	
JAN 7.82	JAN 6.82	755	745	1000	1600	2	1.1	2	28381	2	1	91		
JAN 9.82	JAN 8.82	755	930	1300	2300	2	1.4	2	28382	2	1	143		N
JAN 11.82	JAN 10.82	930	755	1300	500	2	2.4	2	28383	2	1	67	C	M
JAN 13.82	JAN 12.82	755	745	600	745	2	1.1	2	28384	2	1	79		
JAN 14.82	JAN 13.82	750	745	1500	2000	2	1.5	2	28385	2	1	77		
JAN 16.82	JAN 15.82	745	830	400	830	2	3.1	2	28386	2	1	****	GC	N
JAN 18.82	JAN 16.82	830	755	1030	2300	2	1.4	2	28387	2	1	84	C	HZ
JAN 24.82	JAN 22.82	750	1430	1930	1300	2	8.1	2	28388	2	1	****	GC	NZ
JAN 29.82	JAN 28.82	750	745	1000	700	2	0.4	2	28389	2	1	106		
JAN 30.82	JAN 29.82	745	930	300	930	2	5.1	2	28390	2	1	92	C	
JAN 31.82	JAN 30.82	930	845	930	1330	2	2.1	2	28391	2	1	84		
FEB 1.82	JAN 31.82	845	750	1330	500	2	18.1	2	28392	2	1	34		N
FEB 4.82	FEB 3.82	755	750	1030	130	2	17.4	2	28393	2	1	39		N
FEB 6.82	FEB 5.82	750	930	1130	2245	2	3.1	2	28394	2	1	****	G	N
FEB 8.82	FEB 7.82	900	750	1000	730	2	1.1	2	28395	2	1	47	C	N
FEB 9.82	FEB 8.82	750	755	615	745	2	1.2	2	28396	2	1	88		
FEB 14.82	FEB 13.82	915	930	630	830	2	0.5	2	28397	2	1	109		
FEB 19.82	FEB 18.82	750	745	100	730	2	6.2	2	28398	2	1	****	G	
FEB 21.82	FEB 20.82	930	1030	1530	900	2	5.4	2	28399	2	1	****	G	M
MAR 2.82	MAR 1.82	955	745	1330	2145	2	1.3	2	28400	2	1	60		
MAR 5.82	MAR 4.82	750	745	1400	230	2	17.1	2	28401	2	1	67		
MAR 7.82	MAR 6.82	930	915	2000	300	2	0.5	2	28402	2	1	433		N
MAR 9.82	MAR 8.82	730	750	200	730	2	2.5	2	28403	2	1	****	G	N
MAR 11.82	MAR 10.82	750	745	1130	630	3	2.4	2	28404	2	1	106		
MAR 12.82	MAR 11.82	745	750	830	1100	1	0.3	2	28405	2	1	30		N
MAR 13.82	MAR 12.82	750	930	430	845	1	10.4	2	28406	2	1	99		
MAR 17.82	MAR 16.82	750	745	1600	2200	2	20.1	2	28407	2	1	38		N
MAR 19.82	MAR 18.82	750	755	1430	700	3	1.5	2	28408	2	1	130		N
MAR 22.82	MAR 21.82	900	750	930	2000	2	12.1	2	28409	2	1	94		
MAR 26.82	MAR 25.82	750	750	1730	755	2	14.5	2	28410	2	1	104		
MAR 31.82	MAR 30.82	750	755	2000	700	1	1.3	2	28411	2	1	201	C	NJH
APR 1.82	MAR 31.82	755	750	600	730	3	0.3	2	28412	2	1	152	C	NH
APR 4.82	APR 3.82	745	830	745	830	3	13.2	2	28413	2	1	108		
APR 11.82	APR 10.82	930	1015	200	1000	3	2.2	2	28414	2	1	149		N
APR 12.82	APR 11.82	1015	930	1030	2300	3	1.3	2	28415	2	1	70		
APR 13.82	APR 12.82	930	750	1230	750	1	5.2	2	28416	2	1	116		
APR 17.82	APR 16.82	755	815	2100	815	1	3.2	2	28417	2	1	122	C	N
APR 18.82	APR 17.82	815	930	815	1700	1	3.1	2	28418	2	1	151		N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/SES #06 PAGE : 2

REMOVAL DATE	EXPOSURE DATE		VOLUME ML		CONDUCT. UMHO/CM		PH FIELD		PH LAB		TOTAL H+ TO PH6.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L	
JAN 4,82	JAN 3,82		505.0		38.0		4.12		4.05		0.1256		2.75		0.62	
JAN 5,82	JAN 4,82		785.0		16.5		4.56		4.51		0.0652		1.15		0.28	
JAN 7,82	JAN 6,82		165.0		******		******		4.04		******		3.75		1.18	
JAN 9,82	JAN 8,82		330.0		15.9		******		4.51		0.0624		0.60		0.52	
JAN 11,82	JAN 10,82		265.0	U	17.4		******	U	6.77	U	0.0370	U	1.20	U	0.20	
JAN 13,82	JAN 12,82		144.0		27.5		******		4.16		******		0.40		0.72	
JAN 14,82	JAN 13,82		190.0		******		******		4.27		******		0.50		0.39	
JAN 16,82	JAN 15,82	U	195.0		******		******		3.89		******		1.35		1.21	
JAN 18,82	JAN 16,82		195.0		23.0		******		4.38		******		0.90		0.41	
JAN 24,82	JAN 22,82	U	360.0		11.2		4.63		4.62		0.0654		0.55		0.25	
JAN 29,82	JAN 28,82		70.0		******		******		4.14		******		5.00		1.76	
JAN 30,82	JAN 29,82		775.0		21.3		4.44		4.34		0.0770		0.60		0.63	
JAN 31,82	JAN 30,82		290.0		31.4		******		4.11		0.1060		1.60		0.50	
FEB 1,82	JAN 31,82	U	1025.0		14.9		4.52		4.41		0.0692		0.60		0.25	
FEB 4,82	FEB 3,82	U	1130.0		15.6		4.49		4.40		0.0716		0.60		0.29	
FEB 6,82	FEB 5,82		765.0		20.1		4.36		4.28		0.0816		0.40		0.52	
FEB 8,82	FEB 7,82	U	85.0		******		******		4.02		******	U	1.80		1.55	
FEB 9,82	FEB 8,82		175.0		******		******		4.06		******		0.50		1.07	
FEB 14,82	FEB 13,82		90.0		******		******	U	3.86		******	U	4.00	U	1.76	
FEB 19,82	FEB 18,82		715.0	U	13.4	U	4.56	U	4.52	U	0.0644	U	0.70	U	0.30	
FEB 21,82	FEB 20,82		640.0		20.8		4.32		4.21		0.0868		1.10		0.41	
MAR 2,82	MAR 1,82		130.0		40.2		******		4.03		******		0.55		1.21	
MAR 5,82	MAR 4,82		1895.0		34.8		4.18		4.11		0.1136		2.00		0.67	
MAR 7,82	MAR 6,82		355.0		37.8		4.11		4.05		0.1214		0.85		1.00	
MAR 9,82	MAR 8,82	U	30.0		******		******		4.12		******		0.65		0.90	
MAR 11,82	MAR 10,82		420.0		150.0		3.50		3.52		0.4084		10.10		2.73	
MAR 12,82	MAR 11,82	U	15.0		******		******		******		******		******		******	
MAR 13,82	MAR 12,82		1700.0		58.0		3.89		3.94		0.1554		4.90		0.71	
MAR 17,82	MAR 16,82	U	1255.0		14.9		4.58		4.65		0.0456		1.15		0.40	
MAR 19,82	MAR 18,82		320.0		141.0		******		3.52		0.4048		9.85		2.32	
MAR 22,82	MAR 21,82		1870.0		34.8		4.12		4.16		0.1150		2.65		0.63	
MAR 26,82	MAR 25,82		2495.0		10.9		4.67		4.72		0.0480		0.60		0.29	
MAR 31,82	MAR 30,82		430.0		30.6	U	4.59	U	5.02		0.0448		4.75		1.12	
APR 1,82	MAR 31,82		75.0		******		******	U	5.02		0.0378		3.65		0.65	
APR 4,82	APR 3,82		2355.0		10.6		4.88		5.06		0.0298		1.55		0.15	
APR 11,82	APR 10,82		540.0		54.0		4.02		4.07		0.1292		5.20		1.08	
APR 12,82	APR 11,82		150.0		64.2		3.87		3.95		0.1602		5.90		1.18	
APR 13,82	APR 12,82		995.0		52.0		3.93		4.08		0.1482	U	7.10	U	1.53	
APR 17,82	APR 16,82		645.0		77.0		3.79		3.88		0.1816		7.80		1.76	
APR 18,82	APR 17,82		770.0		53.0		3.97		4.11		0.1260		6.70		0.72	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/SES #06 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 4,82	JAN 3,82	0.09	0.09	0.015	0.010	0.080	0.246	0.0891
JAN 5,82	JAN 4,82	0.32	<T 0.01	0.025	0.030	0.010	0.064	0.0309
JAN 7,82	JAN 6,82	0.82	0.38	0.070	0.180	0.180	0.500	0.0912
JAN 9,82	JAN 8,82	0.43	0.14	0.025	0.020	0.080	0.024	0.0309
JAN 11,82	JAN 10,82	U 2.10	U 1.50	U 0.290	0.100	U 0.850	0.024	U 0.0002
JAN 13,82	JAN 12,82	******	U 1.12	******	******	******	0.004	0.0692
JAN 14,82	JAN 13,82	0.06	0.32	0.010	0.020	0.040	0.022	0.0537
JAN 16,82	JAN 15,82	0.27	0.50	0.015	0.020	0.110	0.104	0.1288
JAN 18,82	JAN 16,82	0.59	0.57	0.075	0.040	0.150	0.062	0.0417
JAN 24,82	JAN 22,82	0.13	0.17	0.015	0.015	0.030	0.092	0.0240
JAN 29,82	JAN 28,82	******	U 1.00	******	******	******	******	0.0724
JAN 30,82	JAN 29,82	0.40	0.28	0.020	0.020	0.160	0.070	0.0457
JAN 31,82	JAN 30,82	0.06	0.22	<T 0.005	0.010	0.035	0.092	0.0776
FEB 1,82	JAN 31,82	0.02	U 0.18	<T 0.005	0.005	0.005	0.030	0.0389
FEB 4,82	FEB 3,82	0.02	0.14	<T 0.005	0.005	0.015	0.048	0.0398
FEB 6,82	FEB 5,82	0.02	0.10	<T 0.005	0.005	0.020	0.012	0.0525
FEB 8,82	FEB 7,82	0.02	U 0.52	******	0.040	0.330	U 0.236	0.0955
FEB 9,82	FEB 8,82	0.26	0.38	0.130	0.010	0.155	0.022	0.0871
FEB 14,82	FEB 13,82	U 1.59	U 1.41	U 0.150	0.040	U 1.000	U 0.298	U 0.1380
FEB 19,82	FEB 18,82	0.10	0.08	0.005	<T 0.005	0.040	0.108	U 0.0302
FEB 21,82	FEB 20,82	0.04	0.14	<T 0.005	<T 0.005	0.015	0.218	0.0617
MAR 2,82	MAR 1,82	0.17	0.46	0.035	<T 0.005	0.215	0.024	0.0933
MAR 5,82	MAR 4,82	0.16	0.08	0.010	0.025	0.035	0.268	0.0776
MAR 7,82	MAR 6,82	0.17	0.34	0.015	0.010	0.155	0.050	0.0891
MAR 9,82	MAR 8,82	******	0.45	******	******	******	******	0.0759
MAR 11,82	MAR 10,82	0.65	0.90	0.075	0.045	0.300	1.350	0.3020
MAR 12,82	MAR 11,82	******	******	******	******	******	******	******
MAR 13,82	MAR 12,82	0.23	0.34	0.035	0.020	0.200	0.510	0.1148
MAR 17,82	MAR 16,82	0.42	0.06	0.045	0.020	0.045	0.138	0.0224
MAR 19,82	MAR 18,82	0.73	0.41	0.040	0.020	0.095	0.550	0.3020
MAR 22,82	MAR 21,82	0.40	0.08	0.030	0.015	0.040	0.278	0.0692
MAR 26,82	MAR 25,82	0.22	0.02	0.025	<W 0.005	0.025	0.058	0.0191
MAR 31,82	MAR 30,82	U 2.67	U 0.74	U 0.280	0.065	U 0.460	0.350	U 0.0095
APR 1,82	MAR 31,82	U 1.48	0.29	U 0.165	0.065	0.120	0.600	U 0.0095
APR 4,82	APR 3,82	0.44	0.03	0.060	0.045	0.025	0.142	0.0087
APR 11,82	APR 10,82	0.79	0.25	0.080	0.025	0.110	0.770	0.0851
APR 12,82	APR 11,82	******	0.21	******	******	******	******	0.1122
APR 13,82	APR 12,82	U 1.48	0.38	U 0.175	0.080	0.090	U 1.290	0.0832
APR 17,82	APR 16,82	U 1.75	U 0.57	U 0.190	0.055	0.190	0.810	0.1318
APR 18,82	APR 17,82	0.64	0.38	0.150	0.100	0.225	0.820	0.0776

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/SES #06

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
APR 20,82	APR 19,82	750	755	2330	755	1	4.2	2	28419	2	1	110	A	
APR 21,82	APR 20,82	755	750	755	1930	1	9.4	2	28420	2	1	111		
APR 27,82	APR 26,82	750	855	1300	700	1	1.4	2	28421	2	1	117	BCA	HM

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/SES #06 PAGE : 5

REMOVAL DATE	EXPOSURE DATE	VOLUME ML		CONDUCT. UMHO/CM		PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
APR 20.82	APR 19.82	760.0	U	51.5	U	4.04		4.17		0.1026		5.10	U	1.54
APR 21.82	APR 20.82	1715.0		35.6		4.10		4.18		0.0974		3.65		0.41
APR 27.82	APR 26.82	270.0		78.0	U	7.09	U	7.30	U	0.0380	U	10.40	U	1.89

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/SES #06 PAGE : 4

REMOVAL DATE	EXPOSURE DATE		CALCIUM MG/L		CHLORIDE MG/L		MAGNESIM MG/L		POTASSIM MG/L		SODIUM MG/L		AMMONIUM AS N MG/L		FREE H+ LAB MG/L
APR 20.82	APR 19.82	U	1.35		0.27	U	0.195		0.030		0.075		0.940		0.0676
APR 21.82	APR 20.82		0.16		0.10		0.020		0.020		0.025		0.390		0.0661
APR 27.82	APR 26.82	U	6.70	U	0.80	U	1.100	U	0.635	U	0.285	U	3.700	U	0.0001

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAY 6,82	MAY 5,82	750	745	****	****	1	2.0	1	28422	2	1	70	C	
MAY 8,82	MAY 7,82	****	755	1300	755	1	6.3	1	28423	2	1	92	C	H
MAY 9,82	MAY 8,82	755	950	755	1430	1	2.2	1	28424	2	1	49		N
MAY 20,82	MAY 19,82	800	750	830	1630	1	5.4	1	28425	2	1	101		JH
MAY 23,82	MAY 22,82	900	945	1900	945	1	4.2	1	28426	2	1	96		
MAY 24,82	MAY 23,82	900	845	945	850	1	4.4	1	28427	2	1	97		
MAY 28,82	MAY 27,82	800	755	200	630	1	2.4	1	28428	2	1	117		
MAY 29,82	MAY 28,82	755	845	830	715	1	8.2	1	28429	2	1	97		
MAY 31,82	MAY 30,82	800	750	830	615	1	5.2	1	28430	2	1	84		Y
JUN 2,82	JUN 1,82	800	710	830	1600	1	10.3	1	28431	2	1	93		
JUN 6,82	JUN 5,82	900	845	1500	815	*	8.1	1	28432	2	1	83		
JUN 7,82	JUN 6,82	845	755	910	730	1	1.2	1	28433	2	1	19	C	N
JUN 11,82	JUN 10,82	800	750	1430	200	1	19.4	1	28434	2	1	95		
JUN 14,82	JUN 13,82	800	750	1300	2030	1	2.0	1	28435	2	1	85		
JUN 15,82	JUN 14,82	750	750	400	700	1	2.5	1	28436	2	1	40		N
JUN 16,82	JUN 15,82	750	750	1400	2300	1	25.0	1	28437	2	1	128		N
JUN 18,82	JUN 17,82	750	****	400	500	*	0.4	1	28438	2	1	39		N
JUN 19,82	JUN 18,82	750	815	2100	815	1	7.0	1	28439	2	1	96		
JUN 20,82	JUN 19,82	815	830	815	1619	1	8.1	1	28440	2	1	99		
JUN 21,82	JUN 20,82	830	900	1600	100	1	8.2	1	28441	2	1	256		N
JUN 23,82	JUN 22,82	700	650	830	1930	1	5.3	1	28442	2	1	98		
JUN 25,82	JUN 24,82	800	755	****	****	1	0.4	1	28443	2	1	77		
JUL 12,82	JUL 11,82	700	750	815	855	*	1.0	1	28444	2	1	23		N
JUL 18,82	JUL 17,82	800	815	315	530	1	7.0	1	28445	2	1	27		N
JUL 19,82	JUL 18,82	800	755	1600	2100	1	7.0	1	28446	2	1	90		
JUL 26,82	JUL 25,82	800	750	900	1000	1	1.0	1	28447	2	1	70	C	
JUL 28,82	JUL 27,82	800	750	1900	730	1	17.1	1	28448	2	1	96		
JUL 29,82	JUL 28,82	750	845	1030	1300	1	4.3	1	28449	2	1	92		HM
JUL 31,82	JUL 30,82	800	755	2030	500	1	7.4	1	28450	2	1	99		
AUG 4,82	AUG 3,82	800	800	****	****	1	5.4	1	28451	2	1	96	C	JHC
AUG 10,82	AUG 9,82	800	800	****	****	1	4.1	1	28452	2	1	76	B	
AUG 20,82	AUG 19,82	800	750	1400	500	1	16.2	1	28453	2	1	95		
AUG 21,82	AUG 20,82	750	815	700	800	1	0.4	1	28454	2	1	136	C	N
AUG 22,82	AUG 21,82	815	1015	1000	1400	1	1.0	1	28455	2	1	70		
AUG 23,82	AUG 22,82	1015	755	****	****	1	19.1	1	28456	2	1	101		
AUG 25,82	AUG 24,82	800	800	200	730	1	19.3	1	28457	2	1	86		
AUG 26,82	AUG 25,82	730	745	730	1030	1	6.1	1	28458	2	1	88	B	
AUG 28,82	AUG 27,82	800	910	930	1400	1	2.2	1	28459	2	1	88		
AUG 29,82	AUG 28,82	910	1400	1100	1400	1	2.3	1	28460	2	1	81		HM
SEP 2,82	SEP 1,82	800	750	1945	2345	1	7.2	1	28461	2	1	61	A	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L	NITRATE AS N MG/L
MAY 6,82	MAY 5,82		90.0	******	******		3.87		0.1956		11.85	1.84
MAY 8,82	MAY 7,82		375.0	13.4	4.99		5.22	U	0.0346	U	2.35	0.36
MAY 9,82	MAY 8,82	U	70.0	******	******		5.16		0.0300		0.45	0.15
MAY 20,82	MAY 19,82		350.0	32.5	4.26		4.65		0.0508		3.75	0.80
MAY 23,82	MAY 22,82		260.0	16.3	4.32		4.44		0.0440		1.50	0.25
MAY 24,82	MAY 23,82		275.0	48.4	3.90		4.05		0.1290		4.90	0.60
MAY 28,82	MAY 27,82		180.0	******	3.81		3.87		0.1756		5.45	0.81
MAY 29,82	MAY 28,82		510.0	33.4	4.07		4.23		0.0972		3.30	0.32
MAY 31,82	MAY 30,82		280.0	97.8	3.67		3.71		0.2520		8.90	1.19
JUN 2,82	JUN 1,82		620.0	66.8	3.81		3.89		0.1766		5.55	0.79
JUN 6,82	JUN 5,82		435.0	12.9	******		4.60		0.0364		0.80	0.20
JUN 7,82	JUN 6,82	U	15.0	******	******		4.38		0.0558		******	******
JUN 11,82	JUN 10,82		1185.0	80.0	3.75		3.74		0.2120		8.40	0.59
JUN 14,82	JUN 13,82		110.0	62.1	******		3.99		0.1306		6.85	1.45
JUN 15,82	JUN 14,82	U	65.0	******	******		4.13		0.1078		8.25	1.91
JUN 16,82	JUN 15,82		2065.0	47.7	3.93		3.96		0.1280		4.30	0.53
JUN 18,82	JUN 17,82	U	10.0	******	0.00 ?		******		******		******	******
JUN 19,82	JUN 18,82		435.0	26.2	4.23		4.33		0.0674		2.50	0.57
JUN 20,82	JUN 19,82		515.0	47.5	3.94		3.96		0.1234		3.90	0.69
JUN 21,82	JUN 20,82		1350.0	26.3	4.23		4.29		0.0668		2.50	0.51
JUN 23,82	JUN 22,82		335.0	9.8	******		4.82		0.0304		0.85	0.21
JUN 25,82	JUN 24,82		20.0	******	******		4.22		0.0800		******	******
JUL 12,82	JUL 11,82	U	15.0	******	******		7.78	U	0.0998		******	******
JUL 18,82	JUL 17,82	U	125.0	******	******		4.44		0.0558	U	1.45	0.27
JUL 19,82	JUL 18,82		405.0	22.3	4.20		4.37		0.0600		2.25	0.43
JUL 26,82	JUL 25,82		45.0	******	******		4.50		0.0596		******	******
JUL 28,82	JUL 27,82		1055.0	9.8	4.64		4.70		0.0320		0.65	0.15
JUL 29,82	JUL 28,82		255.0	4.1	4.97		5.08		0.0222		0.05	0.04
JUL 31,82	JUL 30,82		470.0	64.0	3.86		3.80		0.1596		5.35	1.06
AUG 4,82	AUG 3,82		335.0	8.2	4.81	U	5.39	U	0.0230	U	0.65	0.18
AUG 10,82	AUG 9,82		200.0	65.0	3.80		3.81		0.1646		7.35	0.73
AUG 20,82	AUG 19,82		990.0	19.5	4.53		4.71		0.0430		3.55	0.41
AUG 21,82	AUG 20,82		35.0	******	******		6.45	U	0.0224	U	2.50	0.11
AUG 22,82	AUG 21,82		45.0	******	******		4.88		0.0418		6.30	0.44
AUG 23,82	AUG 22,82		1240.0	30.0	4.11		4.16		0.0958		2.85	0.40
AUG 25,82	AUG 24,82		1070.0	16.6	4.33		4.46		0.0606		1.45	0.20
AUG 26,82	AUG 25,82		345.0	5.2	4.81		5.05	U	0.0360		0.45	0.06
AUG 28,82	AUG 27,82		125.0	28.0	******		4.22		0.0924		3.50	0.59
AUG 29,82	AUG 28,82		120.0	******	******		5.54		0.0278		0.20	0.04
SEP 2,82	SEP 1,82		285.0	157.0	3.44		3.39		0.4300		15.00	0.26

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L		CHLORIDE MG/L		MAGNESIM MG/L		POTASSIM MG/L		SODIUM MG/L		AMMONIUM AS N MG/L		FREE H+ LAB MG/L
MAY 6,82	MAY 5,82	******		0.44		******		******		******		******		0.1349
MAY 8,82	MAY 7,82	0.70		0.11		0.160		0.030		0.035		0.238	U	0.0060
MAY 9,82	MAY 8,82	******		0.02		******		******		******		******		0.0069
MAY 20,82	MAY 19,82	0.70		0.10		0.125		0.080		0.025		0.690		0.0224
MAY 23,82	MAY 22,82	0.20	<W	0.01		0.025		0.020	<T	0.010		0.128		0.0363
MAY 24,82	MAY 23,82	0.27		0.02		0.010		0.025	<T	0.010		0.410		0.0891
MAY 28,82	MAY 27,82	0.15		0.08		0.015		0.025		0.015		0.352		0.1349
MAY 29,82	MAY 28,82	0.03	<W	0.01	<W	0.005	<T	0.010	<T	0.005		0.262		0.0589
MAY 31,82	MAY 30,82	0.22		0.20		0.020		0.060		0.025		0.750		0.1950
JUN 2,82	JUN 1,82	0.08		0.15		0.005		0.020		0.015		0.352		0.1288
JUN 6,82	JUN 5,82	0.11		0.04		0.010		0.020	<T	0.010		0.072		0.0251
JUN 7,82	JUN 6,82	******		******		******		******		******		******		0.0417
JUN 11,82	JUN 10,82	0.12		0.06		0.015		0.050		0.025		0.480		0.1820
JUN 14,82	JUN 13,82	******		0.33		******		******		******		******		0.1023
JUN 15,82	JUN 14,82	******		0.49		******		******		******		******		0.0741
JUN 16,82	JUN 15,82	0.09		0.12		0.015		0.040	<T	0.010		0.278		0.1096
JUN 18,82	JUN 17,82	******		******		******		******		******		******		******
JUN 19,82	JUN 18,82	0.28		0.05		0.020		0.030		0.020		0.490		0.0468
JUN 20,82	JUN 19,82	0.13		0.11		0.015	<T	0.010		0.015		0.264		0.1096
JUN 21,82	JUN 20,82	0.16		0.04		0.025	<T	0.015	<T	0.010		0.480		0.0513
JUN 23,82	JUN 22,82	0.18		0.03		0.015		0.020		0.015		0.136		0.0151
JUN 25,82	JUN 24,82	******		******		******		******		******		******		0.0603
JUL 12,82	JUL 11,82	******		******		******		******		******		******	U	0.0000
JUL 18,82	JUL 17,82	0.11		0.06		0.015	<T	0.015		0.020	U	0.120		0.0363
JUL 19,82	JUL 18,82	0.21		0.10		0.025		0.030		0.040		0.366		0.0427
JUL 26,82	JUL 25,82	******		******		******		******		******		******		0.0316
JUL 28,82	JUL 27,82	0.05	<T	0.02	<W	0.005	<T	0.005	<T	0.010		0.114		0.0200
JUL 29,82	JUL 28,82	0.03	<T	0.02		0.010		0.025		0.035		0.060		0.0083
JUL 31,82	JUL 30,82	0.53		0.29		0.120		0.050		0.020		0.312		0.1585
AUG 4,82	AUG 3,82	0.21		0.04		0.055		0.045		0.015		0.250	U	0.0041
AUG 10,82	AUG 9,82	0.33		0.14		0.055		0.050		0.055		0.770		0.1549
AUG 20,82	AUG 19,82	0.61		0.06		0.100		0.030	<T	0.010		0.740		0.0195
AUG 21,82	AUG 20,82	******		0.32		******		******		******		******	U	0.0004
AUG 22,82	AUG 21,82	******		0.31		******		******		******		******		0.0132
AUG 23,82	AUG 22,82	0.10		0.06		0.020	<T	0.010	<W	0.005		0.238		0.0692
AUG 25,82	AUG 24,82	0.05		0.08		0.015	<T	0.010	<T	0.010		0.148		0.0347
AUG 26,82	AUG 25,82	0.05		0.06		0.015	<T	0.010	<T	0.005		0.100	U	0.0089
AUG 28,82	AUG 27,82	0.26		0.12		0.050		0.030		0.025		0.670		0.0603
AUG 29,82	AUG 28,82	0.11		0.07		0.025	<T	0.005		0.015		0.078		0.0029
SEP 2,82	SEP 1,82	0.31		0.32		0.050		0.090		0.090		0.134		0.4074

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
SEP 3,82	SEP 2,82	750	745	515	1600	*	3.4	1	28462	2	1	110		
SEP 4,82	SEP 3,82	745	805	1000	400	1	2.0	1	28463	2	1	74	C	
SEP 6,82	SEP 5,82	800	1015	215	1015	1	4.2	1	28464	2	1	154		N
SEP 13,82	SEP 12,82	800	755	1830	1930	1	3.5	1	28465	2	1	98	FJ	
SEP 15,82	SEP 14,82	755	750	800	745	1	5.2	1	28466	2	1	97	AFJ	
SEP 16,82	SEP 15,82	750	750	200	700	1	1.1	1	28467	2	1	92	FJ	
SEP 18,82	SEP 17,82	750	930	2300	600	1	23.1	1	28468	2	1	106	FJ	
SEP 21,82	SEP 20,82	800	755	1100	200	1	5.1	1	28469	2	1	96	FJ	
SEP 22,82	SEP 21,82	755	750	500	700	1	0.4	1	28470	2	1	117	FJ	
SEP 23,82	SEP 22,82	755	750	400	750	1	2.2	1	28471	2	1	99	FJ	
SEP 24,82	SEP 23,82	750	750	900	1100	1	0.2	1	28472	2	1	7	EFJ	N
SEP 25,82	SEP 24,82	750	930	430	700	1	9.1	1	28473	2	1	94		
SEP 26,82	SEP 25,82	930	745	200	745	1	4.2	1	28474	2	1	102		
SEP 28,82	SEP 27,82	745	750	745	1900	1	5.2	1	28475	2	1	78		
OCT 2,82	OCT 1,82	815	815	1000	1200	1	1.1	1	28476	2	1	****	G	
OCT 8,82	OCT 7,82	750	750	****	****	1	8.2	1	28477	2	1	90		
OCT 9,82	OCT 8,82	750	845	1600	2000	1	3.0	1	28478	2	1	80		H
OCT 11,82	OCT 10,82	945	945	400	745	1	6.3	1	28479	2	1	102		
OCT 12,82	OCT 11,82	945	745	1100	700	1	3.2	1	28480	2	1	99		
OCT 14,82	OCT 13,82	750	750	****	****	1	1.0	1	28481	2	1	****	GE	
OCT 15,82	OCT 14,82	750	750	2200	200	1	14.2	1	28482	2	1	49	H	N
OCT 16,82	OCT 15,82	750	930	****	****	1	2.0	1	28483	2	1	58		
OCT 17,82	OCT 16,82	930	930	****	****	3	2.0	1	28484	2	1	35		N
OCT 21,82	OCT 20,82	745	745	****	****	1	14.1	1	28485	2	1	74		
NOV 1,82	OCT 31,82	800	800	1600	2200	1	2.1	1	28486	2	1	104		
NOV 2,82	NOV 1,82	800	830	1300	830	1	13.3	1	28487	2	1	103		C
NOV 3,82	NOV 2,82	830	830	200	700	1	15.2	1	28488	2	1	95		
NOV 4,82	NOV 3,82	830	830	1700	830	1	16.2	2	28489	2	1	100		
NOV 5,82	NOV 4,82	830	830	930	300	1	9.2	2	28490	2	1	61		
NOV 6,82	NOV 5,82	830	830	1815	100	2	2.3	2	28491	2	1	****	G	N
NOV 11,82	NOV 10,82	930	930	2200	100	1	0.3	2	28492	2	1	312		N
NOV 12,82	NOV 11,82	930	750	1700	600	2	8.4	2	28493	2	1	100		
NOV 13,82	NOV 12,82	750	830	1100	1600	1	4.3	2	28494	2	1	154		N
NOV 15,82	NOV 14,82	750	750	1900	300	2	2.5	2	28495	2	1	****	EK	
NOV 21,82	NOV 20,82	800	1130	840	1030	1	17.3	2	28496	2	1	94		
NOV 22,82	NOV 21,82	1130	750	1500	2100	1	0.4	2	28497	2	1	117		
NOV 24,82	NOV 23,82	750	750	****	****	3	19.3	2	28498	2	1	25		N
NOV 27,82	NOV 26,82	800	800	****	****	2	1.3	2	28499	2	1	****	EK	
NOV 29,82	NOV 28,82	750	750	1630	750	1	18.2	2	28500	2	1	102		
NOV 30,82	NOV 29,82	750	750	750	750	1	2.2	2	28501	2	1	177		N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06 PAGE : 5

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L	
SEP 3,82	SEP 2,82		240.0	13.2	******		5.21		0.0444		2.15		0.31	
SEP 4,82	SEP 3,82		95.0	4.6	******		5.71		0.0412		0.65		0.05	
SEP 6,82	SEP 5,82		415.0	35.0	4.14		4.13		0.1032		3.85		0.73	
SEP 13,82	SEP 12,82		220.0	42.5	4.00		4.04		0.1350		5.35		0.72	
SEP 15,82	SEP 14,82		325.0	29.0	4.12		4.17		0.0958		3.10		0.38	
SEP 16,82	SEP 15,82		65.0	******	******		4.05		0.1246		3.55		0.74	
SEP 18,82	SEP 17,82		1575.0	20.0	4.38		4.27		0.0634		1.80		0.28	
SEP 21,82	SEP 20,82		315.0	27.8	4.26		4.40		0.0726		3.80		0.74	
SEP 22,82	SEP 21,82		30.0	******	******		3.93		0.1248		4.00		1.02	
SEP 23,82	SEP 22,82		140.0	21.5	******		4.28		0.0692		1.70		0.38	
SEP 24,82	SEP 23,82	U	1.0	******	******		******		******		******		******	
SEP 25,82	SEP 24,82		550.0	44.5	3.93		3.93		0.1256		3.80		0.66	
SEP 26,82	SEP 25,82		275.0	7.8	4.61		4.74		0.0488		0.40		0.11	
SEP 28,82	SEP 27,82		260.0	7.5	4.52		4.83		0.0318		0.60		0.12	
OCT 2,82	OCT 1,82		59.0	******	******		******		******		******		******	
OCT 8,82	OCT 7,82		475.0	83.0	3.81		3.71		0.2260		8.40		0.93	
OCT 9,82	OCT 8,82		155.0	******	******	U	6.05	U	0.0452	U	5.95	U	1.63	
OCT 11,82	OCT 10,82		415.0	32.6	4.18		4.04		0.0986		3.05		0.36	
OCT 12,82	OCT 11,82		205.0	******	3.77		3.63		0.2360		6.85		1.94	
OCT 14,82	OCT 13,82		35.0	******	******		******		******		******		******	
OCT 15,82	OCT 14,82	U	450.0	10.2	4.69		4.77		0.0388		1.00		0.21	
OCT 16,82	OCT 15,82		75.0	******	******	U	5.55		0.0224		0.40		0.03	
OCT 17,82	OCT 16,82	U	45.0	******	******		5.40		0.0264		0.25		0.03	
OCT 21,82	OCT 20,82		670.0	21.6	4.23		4.31		0.0678		2.40		0.28	
NOV 1,82	OCT 31,82		140.0	******	******		4.30		0.0638		3.35		0.57	
NOV 2,82	NOV 1,82		880.0	49.4	******		4.39		0.0564		1.30		0.23	
NOV 3,82	NOV 2,82		935.0	26.5	******		4.15		0.0832		1.95		0.50	
NOV 4,82	NOV 3,82		1040.0	******	4.85		5.01		0.0214		0.30		0.09	
NOV 5,82	NOV 4,82		365.0	15.9	4.43		4.43		0.0524		1.05		0.30	
NOV 6,82	NOV 5,82		355.0	10.6	4.61		4.76		0.0354		1.00		0.21	
NOV 11,82	NOV 10,82		60.0	******	******		3.73		0.2260		7.20	U	2.48	
NOV 12,82	NOV 11,82		540.0	38.0	4.11		4.17		0.1076		3.20		0.62	
NOV 13,82	NOV 12,82		425.0	20.0	4.42		4.42		0.0690		2.10		0.30	
NOV 15,82	NOV 14,82		******	******	******		******		******		******		******	
NOV 21,82	NOV 20,82		1050.0	28.0	4.18		4.22		0.0878		2.45		0.38	
NOV 22,82	NOV 21,82		30.0	******	******		4.08		0.1154		5.50		0.40	
NOV 24,82	NOV 23,82	U	315.0	10.0	4.59		4.62		0.0466		0.55		0.17	
NOV 27,82	NOV 26,82		******	******	******		******		******		******		******	
NOV 29,82	NOV 28,82		1195.0	22.0	4.32		4.26		0.0878		2.05		0.36	
NOV 30,82	NOV 29,82		250.0	******	4.36		4.34		0.0672		1.35		0.25	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 3,82	SEP 2,82	0.38	0.14	0.030	0.015	0.020	0.650	0.0062
SEP 4,82	SEP 3,82	0.18	0.07	0.025	0.030	0.065	******	0.0019
SEP 6,82	SEP 5,82	0.56	0.14	0.075	0.030	0.025	0.630	0.0741
SEP 13,82	SEP 12,82	0.80	0.28	0.080	0.085	0.090	0.720	0.0912
SEP 15,82	SEP 14,82	0.13	0.19	0.025	0.070	0.080	0.430	0.0676
SEP 16,82	SEP 15,82	******	0.20	******	******	******	******	0.0891
SEP 18,82	SEP 17,82	0.05	0.12	0.010	<W 0.005	0.005	0.222	0.0537
SEP 21,82	SEP 20,82	0.55	0.28	0.085	0.070	0.050	U 1.100	0.0398
SEP 22,82	SEP 21,82	******	0.31	******	******	******	******	0.1175
SEP 23,82	SEP 22,82	0.18	0.14	0.025	0.030	0.040	0.114	0.0525
SEP 24,82	SEP 23,82	******	******	******	******	******	******	******
SEP 25,82	SEP 24,82	0.06	0.11	0.005	0.015	0.010	0.460	0.1175
SEP 26,82	SEP 25,82	0.04	0.11	<W 0.005	0.020	0.015	0.030	0.0182
SEP 28,82	SEP 27,82	0.04	0.07	0.005	0.005	0.005	0.200	0.0148
OCT 2,82	OCT 1,82	******	******	******	******	******	******	******
OCT 8,82	OCT 7,82	0.33	0.26	0.030	0.040	0.070	0.890	0.1950
OCT 9,82	OCT 8,82	U 2.00	U 0.46	U 0.315	U 0.200	U 0.100	U 1.670	U 0.0009
OCT 11,82	OCT 10,82	0.11	0.14	0.005	0.010	0.040	0.252	0.0912
OCT 12,82	OCT 11,82	0.26	0.33	0.030	0.040	0.050	1.350	0.2344
OCT 14,82	OCT 13,82	******	******	******	******	******	******	******
OCT 15,82	OCT 14,82	0.10	<W 0.01	0.020	0.030	0.020	U 0.242	0.0170
OCT 16,82	OCT 15,82	******	0.04	******	******	******	0.058	U 0.0028
OCT 17,82	OCT 16,82	******	0.26	******	******	******	******	0.0040
OCT 21,82	OCT 20,82	0.27	0.20	0.060	0.040	0.150	0.220	0.0490
NOV 1,82	OCT 31,82	0.86	0.14	0.210	0.045	0.080	0.198	0.0501
NOV 2,82	NOV 1,82	0.14	<W 0.01	0.015	0.010	0.015	0.108	0.0407
NOV 3,82	NOV 2,82	0.08	0.09	0.020	0.015	0.030	0.264	0.0708
NOV 4,82	NOV 3,82	0.05	0.07	<W 0.005	0.015	0.070	0.060	0.0098
NOV 5,82	NOV 4,82	0.07	0.08	0.005	<W 0.005	0.040	0.220	0.0372
NOV 6,82	NOV 5,82	0.06	0.05	0.005	<W 0.005	0.040	0.220	0.0174
NOV 11,82	NOV 10,82	******	U 1.13	******	******	******	******	0.1862
NOV 12,82	NOV 11,82	0.16	0.25	0.020	0.015	0.115	0.334	0.0676
NOV 13,82	NOV 12,82	0.19	0.28	0.040	0.020	0.150	0.232	0.0380
NOV 15,82	NOV 14,82	******	******	******	******	******	******	******
NOV 21,82	NOV 20,82	0.03	0.13	<W 0.005	<W 0.005	0.035	0.164	0.0603
NOV 22,82	NOV 21,82	******	******	******	******	******	******	0.0832
NOV 24,82	NOV 23,82	0.01	0.07	0.005	<W 0.005	<W 0.005	0.022	0.0240
NOV 27,82	NOV 26,82	******	******	******	******	******	******	******
NOV 29,82	NOV 28,82	0.33	0.10	0.010	0.020	0.010	0.088	0.0550
NOV 30,82	NOV 29,82	0.05	0.09	0.005	0.015	0.020	0.076	0.0457

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
DEC 1,82	NOV 30,82	750	750	2300	700	1	0.3	2	28502	2	1	208		N
DEC 3,82	DEC 2,82	755	755	1600	200	1	31.1	2	28503	2	1	75		
DEC 4,82	DEC 3,82	755	915	930	2330	1	9.4	2	28504	2	1	103		
DEC 5,82	DEC 4,82	915	1100	400	1000	1	2.3	2	28505	2	1	91		
DEC 6,82	DEC 5,82	1100	845	1100	745	1	12.1	2	28506	2	1	108		
DEC 9,82	DEC 8,82	830	830	1500	2200	2	3.5	2	28507	2	1	24		N
DEC 11,82	DEC 10,82	945	945	100	200	*	1.1	2	28508	2	1	****	EK	
DEC 16,82	DEC 15,82	800	1700	1600	1500	3	17.1	2	28509	2	1	120		N
DEC 19,82	DEC 18,82	800	1100	100	900	2	2.5	2	28510	2	1	40		N
DEC 20,82	DEC 19,82	830	1100	200	700	2	5.3	2	28511	2	1	****	KE	
DEC 21,82	DEC 20,82	830	755	1000	700	1	****	2	28512	2	1	****		
DEC 24,82	DEC 23,82	755	755	1700	600	1	10.2	2	28513	2	1	81		
DEC 25,82	DEC 24,82	755	930	1600	900	1	12.2	2	28514	2	1	93		
DEC 26,82	DEC 25,82	930	1015	1400	2100	1	1.5	2	28515	2	1	179		N
DEC 28,82	DEC 27,82	915	915	2200	915	1	3.2	2	28516	2	1	95		
DEC 30,82	DEC 29,82	****	****	****	****	*	3.1	2	28517	2	1	****	EK	
JAN 1,83	DEC 31,82	1030	1030	1600	200	*	3.1	2	28518	2	1	****	EK	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06 PAGE : 8

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L	
DEC 1,82	NOV 30,82		40.0	******	******		3.62		0.2820		7.65		> 2.00	
DEC 3,82	DEC 2,82		1510.0	20.5	4.35		4.34		0.0748		1.90		0.17	
DEC 4,82	DEC 3,82		625.0	17.5	4.39		4.37		0.0694		1.10		0.30	
DEC 5,82	DEC 4,82		135.0	******	******	U	3.90	U	0.1326	U	3.05	U	0.56	
DEC 6,82	DEC 5,82		845.0	15.5	4.48		4.43		0.0606		1.20		0.18	
DEC 9,82	DEC 8,82	U	55.0	******	******		4.64		0.0490		2.00		0.44	
DEC 11,82	DEC 10,82		******	******	******		******		******		******		******	
DEC 16,82	DEC 15,82		1322.0	23.6	4.19		4.35		0.0736		1.70		0.34	
DEC 19,82	DEC 18,82	U	65.0	******	******		4.46		0.0570		2.45		0.92	
DEC 20,82	DEC 19,82		******	******	******		******		******		******		******	
DEC 21,82	DEC 20,82		34.0	******	******		4.33		0.0776		0.80		0.74	
DEC 24,82	DEC 23,82		532.0	46.0	3.99		3.98		0.1428		3.90		0.61	
DEC 25,82	DEC 24,82		734.0	32.6	4.16		4.13		0.1014		2.50		0.38	
DEC 26,82	DEC 25,82		173.0	******	******		4.62		0.0526		2.40		0.28	
DEC 28,82	DEC 27,82		195.0	******	4.24		4.24		0.0854		1.90		0.37	
DEC 30,82	DEC 29,82		******	******	******		******		******		******		******	
JAN 1,83	DEC 31,82		******	******	******		******		******		******		******	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : BALSAM LAKE/DAILY/AEROCHEM #06 PAGE : 9

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 1,82	NOV 30,82	******	0.63	******	******	******	******	0.2399
DEC 3,82	DEC 2,82	0.03	0.21	0.010	<T 0.005	0.080	0.066	0.0457
DEC 4,82	DEC 3,82	0.04	0.06	0.005	<T 0.005	0.020	0.128	0.0427
DEC 5,82	DEC 4,82	0.11	0.34	0.025	0.025	0.175	0.160	U 0.1259
DEC 6,82	DEC 5,82	0.02	0.09	0.005	0.015	0.040	0.134	0.0372
DEC 9,82	DEC 8,82	******	0.26	******	******	******	******	0.0229
DEC 11,82	DEC 10,82	******	******	******	******	******	******	******
DEC 16,82	DEC 15,82	0.07	0.20	0.010	0.010	0.010	0.110	0.0447
DEC 19,82	DEC 18,82	U 1.52	U 0.70	U 0.150	0.030	0.380	******	0.0347
DEC 20,82	DEC 19,82	******	******	******	******	******	******	******
DEC 21,82	DEC 20,82	******	******	******	******	******	******	0.0468
DEC 24,82	DEC 23,82	0.13	0.19	0.025	0.040	0.075	0.360	0.1047
DEC 25,82	DEC 24,82	0.06	0.34	0.025	0.025	0.150	0.136	0.0741
DEC 26,82	DEC 25,82	0.34	0.16	0.040	0.035	0.170	0.430	0.0240
DEC 28,82	DEC 27,82	0.04	0.22	0.020	0.015	0.130	0.108	0.0575
DEC 30,82	DEC 29,82	******	******	******	******	******	******	******
JAN 1,83	DEC 31,82	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/SES #08 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 2,82	JAN 1,82	900	830	900	1400	2	1.1	2	27211	2	1	47		N
JAN 3,82	JAN 2,82	830	830	****	****	2	0.9	2	27212	2	1	37		N
JAN 4,82	JAN 3,82	830	830	300	830	3	2.3	2	27213	2	1	86		
JAN 5,82	JAN 4,82	830	830	830	200	3	14.3	2	27215	2	1	88	C	
JAN 7,82	JAN 6,82	830	****	1200	1300	2	0.3	2	27218	2	1	10	E	N
JAN 8,82	JAN 7,82	830	830	700	1000	2	****	2	27220	2	1	****	E	
JAN 9,82	JAN 8,82	830	830	****	****	2	3.3	2	27222	2	1	80		
JAN 10,82	JAN 9,82	830	830	****	****	2	0.3	2	27224	2	1	40		N
JAN 11,82	JAN 10,82	830	900	1200	300	2	15.7	2	27225	2	1	55		
JAN 13,82	JAN 12,82	830	800	600	800	2	0.3	2	27228	2	1	223	C	N
JAN 14,82	JAN 13,82	800	900	800	1300	2	1.4	2	27230	2	1	82		
JAN 16,82	JAN 15,82	800	830	****	****	2	4.5	2	27232	2	1	5		N
JAN 17,82	JAN 16,82	830	830	1200	1400	2	1.9	2	27234	2	1	4	ECH	N
JAN 18,82	JAN 17,82	830	800	600	800	2	0.5	2	27236	2	1	85		
JAN 19,82	JAN 18,82	800	830	****	****	2	****	2	27238	2	1	****	E	
JAN 20,82	JAN 19,82	830	800	****	****	2	0.4	2	27240	2	1	60	C	
JAN 23,82	JAN 22,82	800	830	500	830	4	16.2	2	27242	2	1	58		
JAN 24,82	JAN 23,82	830	830	830	1400	3	7.2	2	27244	2	1	60	C	
JAN 25,82	JAN 24,82	830	830	****	****	2	****	2	27246	2	1	****	E	
JAN 28,82	JAN 27,82	800	830	****	****	2	****	2	27248	2	1	****	E	
JAN 29,82	JAN 28,82	830	900	830	2200	2	2.5	2	27250	2	1	54		
JAN 30,82	JAN 29,82	900	900	2300	900	2	****	*	27252	2	1	****		
FEB 1,82	JAN 31,82	830	845	1500	600	2	17.1	2	27254	2	1	64		
FEB 4,82	FEB 3,82	815	800	1000	2300	2	16.7	2	27256	2	1	83		
FEB 6,82	FEB 5,82	845	830	1400	400	2	4.1	2	27258	2	1	95		
FEB 7,82	FEB 6,82	830	830	****	****	2	0.3	2	27260	2	1	40	E	N
FEB 8,82	FEB 7,82	830	800	1200	100	2	3.9	2	27262	2	1	96		
FEB 9,82	FEB 8,82	800	930	1600	930	2	1.0	2	27264	2	1	****	G	
FEB 10,82	FEB 9,82	930	830	930	830	2	****	2	27266	2	1	****	E	
FEB 11,82	FEB 10,82	830	900	830	900	2	0.7	2	27269	2	1	47	E	N
FEB 12,82	FEB 11,82	900	930	****	****	2	1.1	2	27270	2	1	41		N
FEB 13,82	FEB 12,82	930	830	****	****	2	****	2	27272	2	1	****	E	
FEB 14,82	FEB 13,82	830	830	****	****	2	0.7	2	27274	2	1	82		
FEB 19,82	FEB 18,82	800	800	1800	2400	2	4.1	2	27277	2	1	93		
FEB 20,82	FEB 19,82	800	830	1600	1700	2	0.2	2	27278	2	1	61		
FEB 21,82	FEB 20,82	830	830	1600	830	2	7.2	2	27279	2	1	95		
FEB 22,82	FEB 21,82	830	800	830	1300	2	0.5	2	27281	2	1	85		
FEB 23,82	FEB 22,82	800	800	2400	400	2	1.0	2	27283	2	1	97		
FEB 27,82	FEB 26,82	800	830	****	****	2	1.2	2	27285	2	1	61		
MAR 1,82	FEB 28,82	830	800	****	****	2	0.9	2	27287	2	1	50	C	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/SES #08 PAGE : 2

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 2,82	JAN 1,82	U 85.0	******	******	4.15	******	3.10	0.64
JAN 3,82	JAN 2,82	U 55.0	******	******	4.21	******	******	******
JAN 4,82	JAN 3,82	325.0	49.5	******	3.94	0.1524	3.65	0.78
JAN 5,82	JAN 4,82	2080.0	24.8	4.17	4.24	0.0926	1.85	0.38
JAN 7,82	JAN 6,82	U 5.0	******	******	******	******	******	******
JAN 8,82	JAN 7,82	1.0	******	******	******	******	******	******
JAN 9,82	JAN 8,82	435.0	19.6	4.24	4.35	0.0798	0.50	0.60
JAN 10,82	JAN 9,82	U 20.0	******	******	4.37	******	******	******
JAN 11,82	JAN 10,82	1440.0	5.0	5.09	5.16	0.0424	0.25	0.04
JAN 13,82	JAN 12,82	110.0	41.3	******	4.04	******	0.60	1.04
JAN 14,82	JAN 13,82	190.0	******	******	4.39	******	0.50	0.38
JAN 16,82	JAN 15,82	U 44.0	39.5	3.99	4.00	0.1380	0.50	1.11
JAN 17,82	JAN 16,82	U 15.0	******	******	******	******	******	******
JAN 18,82	JAN 17,82	70.0	******	******	4.05	******	0.60	1.12
JAN 19,82	JAN 18,82	10.0	******	******	******	******	******	******
JAN 20,82	JAN 19,82	40.0	******	******	3.71	******	7.00	2.30
JAN 23,82	JAN 22,82	1560.0	9.2	4.75	4.66	0.0558	0.40	0.16
JAN 24,82	JAN 23,82	715.0	35.4	4.05	4.12	0.1088	1.85	0.72
JAN 25,82	JAN 24,82	<T 1.0	******	******	******	******	******	******
JAN 28,82	JAN 27,82	<T 1.0	******	******	******	******	******	******
JAN 29,82	JAN 28,82	225.0	56.0	******	3.93	0.1592	3.55	1.45
JAN 30,82	JAN 29,82	540.0	24.8	4.10	4.14	0.1062	1.25	0.66
FEB 1,82	JAN 31,82	1810.0	10.0	4.57	4.62	0.0558	0.50	0.22
FEB 4,82	FEB 3,82	2295.0	16.7	4.35	4.34	0.0706	0.50	0.40
FEB 6,82	FEB 5,82	645.0	12.8	4.43	4.43	0.0620	0.30	0.32
FEB 7,82	FEB 6,82	U 20.0	******	******	******	******	******	******
FEB 8,82	FEB 7,82	620.0	35.3	4.05	4.02	0.1162	0.85	1.03
FEB 9,82	FEB 8,82	125.0	52.0	******	3.90	******	1.45	1.38
FEB 10,82	FEB 9,82	5.0	******	******	******	******	******	******
FEB 11,82	FEB 10,82	U 55.0	******	******	******	******	******	******
FEB 12,82	FEB 11,82	U 75.0	******	******	3.70	******	1.45	1.46
FEB 13,82	FEB 12,82	20.0	******	******	******	******	******	******
FEB 14,82	FEB 13,82	95.0	******	******	4.25	******	0.50	0.37
FEB 19,82	FEB 18,82	630.0	31.7	4.20	4.08	0.1016	1.50	0.69
FEB 20,82	FEB 19,82	20.0	******	******	******	******	11.30	1.76
FEB 21,82	FEB 20,82	1130.0	******	4.22	4.39	******	1.20	0.29
FEB 22,82	FEB 21,82	70.0	******	******	4.13	******	2.25	0.40
FEB 23,82	FEB 22,82	160.0	******	******	******	******	U 0.45	0.24
FEB 27,82	FEB 26,82	120.0	******	******	4.15	******	0.90	1.15
MAR 1,82	FEB 28,82	75.0	******	******	4.20	******	0.70	0.81

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/SES #08 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L		CHLORIDE MG/L		MAGNESIM MG/L		POTASSIM MG/L		SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 2,82	JAN 1,82	******		0.18		******		******		******	******	0.0708
JAN 3,82	JAN 2,82	******		******		******		******		******	******	0.0617
JAN 4,82	JAN 3,82	0.05		0.16	<T	0.005		0.030		0.030	******	0.1148
JAN 5,82	JAN 4,82	0.08		0.10		0.010		0.070		0.030	******	0.0575
JAN 7,82	JAN 6,82	******		******		******		******		******	******	******
JAN 8,82	JAN 7,82	******		******		******		******		******	******	******
JAN 9,82	JAN 8,82	0.14		0.16		0.015		0.010		0.040	0.058	0.0447
JAN 10,82	JAN 9,82	******		******		******		******		******	******	0.0427
JAN 11,82	JAN 10,82	0.04		0.32		0.025		0.010		0.160	0.004	0.0069
JAN 13,82	JAN 12,82	0.10	U	0.84		0.020		0.030		0.140	******	0.0912
JAN 14,82	JAN 13,82	0.02		0.27	<T	0.005		0.010		0.060	0.006	0.0407
JAN 16,82	JAN 15,82	0.06		0.31		0.020		0.030		0.060	0.036	0.1000
JAN 17,82	JAN 16,82	******		******		******		******		******	******	******
JAN 18,82	JAN 17,82	******		0.40		******		******		******	******	0.0891
JAN 19,82	JAN 18,82	******		******		******		******		******	******	******
JAN 20,82	JAN 19,82	******		1.06		******		******		******	******	0.1950
JAN 23,82	JAN 22,82	0.02		0.01	<T	0.005		0.020		0.010	0.026	0.0219
JAN 24,82	JAN 23,82	0.11		0.13		0.020		0.030		0.040	0.214	0.0759
JAN 25,82	JAN 24,82	******		******		******		******		******	******	******
JAN 28,82	JAN 27,82	******		******		******		******		******	******	******
JAN 29,82	JAN 28,82	0.30		0.36		0.045		0.050		0.140	0.780	0.1175
JAN 30,82	JAN 29,82	0.23		0.34		0.040		0.015		0.190	0.090	0.0724
FEB 1,82	JAN 31,82	0.04		0.04	<T	0.005		0.005		0.015	0.012	0.0240
FEB 4,82	FEB 3,82	0.04		0.13	<T	0.005		0.005		0.020	0.036	0.0457
FEB 6,82	FEB 5,82	0.01		0.03	<T	0.005	<T	0.005		0.010	0.006	0.0372
FEB 7,82	FEB 6,82	******		******		******		******		******	******	******
FEB 8,82	FEB 7,82	0.04		0.16		0.025		0.025		0.040	0.140	0.0955
FEB 9,82	FEB 8,82	0.23		0.54		0.060		0.035		0.250	0.186	0.1259
FEB 10,82	FEB 9,82	******		******		******		******		******	******	******
FEB 11,82	FEB 10,82	******		******		******		******		******	******	******
FEB 12,82	FEB 11,82	******	U	1.22		******		******		******	0.172	0.1995
FEB 13,82	FEB 12,82	******		******		******		******		******	******	******
FEB 14,82	FEB 13,82	******		0.29		******		******		******	0.008	0.0562
FEB 19,82	FEB 18,82	0.16		0.15		0.015	<T	0.005		0.060	0.082	0.0832
FEB 20,82	FEB 19,82	******		******		******		******		******	******	******
FEB 21,82	FEB 20,82	0.04		0.13	<T	0.005	<T	0.005		0.090	0.180	0.0407
FEB 22,82	FEB 21,82	******	U	1.16		******		******		******	******	0.0741
FEB 23,82	FEB 22,82	******		0.11		******		******		******	******	******
FEB 27,82	FEB 26,82	0.58		0.41		0.115		0.005		0.125	0.104	0.0708
MAR 1,82	FEB 28,82	******		0.32		******		******		******	0.092	0.0631

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/SES #08 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAR 2.82	MAR 1.82	800	800	1000	1800	2	4.5	2	27289	2	1	70		
MAR 3.82	MAR 2.82	800	830	****	****	2	****	2	27291	2	1	****	E	
MAR 5.82	MAR 4.82	800	930	1400	2400	2	11.7	2	27294	2	1	80		
MAR 6.82	MAR 5.82	930	830	****	****	2	0.2	2	27295	2	1	12	E	N
MAR 7.82	MAR 6.82	830	830	1600	800	2	2.2	2	27296	2	1	90		
MAR 8.82	MAR 7.82	830	800	2400	600	2	0.2	2	27298	2	1	45		N
MAR 9.82	MAR 8.82	800	800	600	800	2	1.3	2	27300	2	1	63		
MAR 10.82	MAR 9.82	800	800	800	1600	2	0.9	2	27301	2	1	47		N
MAR 11.82	MAR 10.82	800	800	830	2400	3	4.6	2	27303	2	1	82		
MAR 12.82	MAR 11.82	800	800	800	1500	1	3.3	2	27306	2	1	118		
MAR 13.82	MAR 12.82	800	830	200	830	1	18.1	2	27307	2	1	100		
MAR 14.82	MAR 13.82	830	830	830	200	3	2.1	2	27310	2	1	****	EFG	
MAR 17.82	MAR 16.82	800	800	1600	900	2	8.6	2	27311	2	1	68		
MAR 18.82	MAR 17.82	800	800	800	1000	4	****	2	27313	2	1	****	E	
MAR 19.82	MAR 18.82	800	930	1400	2200	3	3.9	2	27315	2	1	109		
MAR 22.82	MAR 21.82	830	800	1000	1700	2	8.2	2	27316	2	1	95	C	
MAR 23.82	MAR 22.82	800	800	2000	2200	2	0.6	2	27318	2	1	81		
MAR 26.82	MAR 25.82	800	830	1800	830	2	8.7	2	27320	2	1	77		
MAR 27.82	MAR 26.82	830	830	830	1200	2	0.3	2	27321	2	1	2	E	N
MAR 31.82	MAR 30.82	800	1000	2100	2300	1	2.8	2	27323	2	1	136		N
APR 1.82	MAR 31.82	1000	930	1630	1800	3	0.5	2	27327	2	1	201		N
APR 3.82	APR 2.82	800	830	700	830	1	13.0	2	27331	2	1	102		HM
APR 4.82	APR 3.82	830	830	830	800	3	7.1	2	27335	2	1	75	C	
APR 5.82	APR 4.82	830	1200	930	1400	2	0.9	2	27339	2	1	23	C	N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/SES #08 PAGE : 5

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L	
MAR 2.82	MAR 1.82		520.0	51.4	3.94		3.94		0.1562		2.35		1.29	
MAR 3.82	MAR 2.82		2.0	******	******		******		******		******		******	
MAR 5.82	MAR 4.82		1545.0	18.6	4.39		4.34		0.0734		0.35		0.51	
MAR 6.82	MAR 5.82	U	4.0	******	******		******		******		******		******	
MAR 7.82	MAR 6.82		325.0	40.5	******		4.01		0.1282		0.75		1.09	
MAR 8.82	MAR 7.82	U	15.0	******	******		******		******		******		******	
MAR 9.82	MAR 8.82		135.0	68.0	******		4.05		******	U	6.05	U	2.07	
MAR 10.82	MAR 9.82	U	70.0	******	******		4.09		******		0.85		0.79	
MAR 11.82	MAR 10.82		620.0	78.5	3.85		3.80		0.2220		5.10		1.61	
MAR 12.82	MAR 11.82		640.0	60.5	3.88		3.85		0.1822		3.90		0.98	
MAR 13.82	MAR 12.82		2990.0	47.9	3.99		3.96		0.1536		3.95		0.60	
MAR 14.82	MAR 13.82		******	******	******		******		******		******		******	
MAR 17.82	MAR 16.82		970.0	18.2	4.47		4.45		0.0620		1.00		0.40	
MAR 18.82	MAR 17.82		10.0	******	******		******		******		******		******	
MAR 19.82	MAR 18.82		700.0	49.0	3.93		3.94		0.1432		2.20		1.03	
MAR 22.82	MAR 21.82		1280.0	21.2	4.30		4.38		0.0750		1.55		0.33	
MAR 23.82	MAR 22.82		80.0	******	******		4.25		0.0834		2.95		0.20	
MAR 26.82	MAR 25.82		1105.0	10.3	4.70		4.69		0.0410		0.35		0.23	
MAR 27.82	MAR 26.82	U	1.0	******	******		******		******		******		******	
MAR 31.82	MAR 30.82		625.0	50.6	3.95		3.98		0.1540		4.60		1.09	
APR 1.82	MAR 31.82		165.0	33.4	******		6.33	U	0.0356		5.50		1.45	
APR 3.82	APR 2.82		2190.0	11.5	4.54		4.58		0.0444		0.80		0.08	
APR 4.82	APR 3.82		880.0	******	6.46	U	******		******		******		******	
APR 5.82	APR 4.82	U	35.0	******	******		4.20		0.0784		7.65		0.80	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/SES #08

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAR 2,82	MAR 1,82	0.23	0.50	0.030	0.025	0.075	0.450	0.1148
MAR 3,82	MAR 2,82	******	******	******	******	******	******	******
MAR 5,82	MAR 4,82	0.03	0.04	<T 0.005	<T 0.005	0.025	0.018	0.0457
MAR 6,82	MAR 5,82	******	******	******	******	******	******	******
MAR 7,82	MAR 6,82	0.12	0.32	0.015	<T 0.005	0.100	0.050	0.0977
MAR 8,82	MAR 7,82	******	******	******	******	******	******	******
MAR 9,82	MAR 8,82	U 2.24	U 1.14	U 0.195	0.075	U 0.470	U 1.490	0.0891
MAR 10,82	MAR 9,82	******	0.35	******	******	******	******	0.0813
MAR 11,82	MAR 10,82	0.44	0.54	0.040	0.055	0.225	0.760	0.1585
MAR 12,82	MAR 11,82	0.10	0.24	0.010	0.025	0.050	0.660	0.1413
MAR 13,82	MAR 12,82	0.10	0.22	0.015	0.015	0.125	0.450	0.1096
MAR 14,82	MAR 13,82	******	******	******	******	******	******	******
MAR 17,82	MAR 16,82	0.22	0.02	0.025	0.025	0.010	0.092	0.0355
MAR 18,82	MAR 17,82	******	******	******	******	******	******	******
MAR 19,82	MAR 18,82	0.13	0.09	0.005	<T 0.005	0.015	0.132	0.1148
MAR 22,82	MAR 21,82	0.25	0.04	0.020	0.020	0.020	0.134	0.0417
MAR 23,82	MAR 22,82	******	0.18	******	******	******	0.108	0.0562
MAR 26,82	MAR 25,82	0.05	0.02	0.005	0.010	0.015	0.022	0.0204
MAR 27,82	MAR 26,82	******	******	******	******	******	******	******
MAR 31,82	MAR 30,82	0.92	0.50	0.100	0.025	0.200	0.350	0.1047
APR 1,82	MAR 31,82	U 1.82	0.42	U 0.215	0.160	0.160	U 1.730	U 0.0005
APR 3,82	APR 2,82	0.13	0.03	0.010	0.015	0.005	0.094	0.0263
APR 4,82	APR 3,82	U 2.53	******	U 0.185	0.250	0.135	******	******
APR 5,82	APR 4,82	******	0.33	******	******	******	******	0.0631

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #08 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
APR 11,82	APR 10,82	830	830	2300	830	2	4.9	2	27345	2	1	36		N
APR 12,82	APR 11,82	830	830	830	2000	2	****	*	27348	2	1	****		N
APR 13,82	APR 12,82	830	800	2300	800	1	8.1	2	27349	2	1	101		
APR 14,82	APR 13,82	800	800	800	1300	1	4.0	2	27354	2	1	128		N
APR 17,82	APR 16,82	900	830	2130	530	1	8.5	2	27357	2	1	99		
APR 18,82	APR 17,82	830	830	830	1100	3	1.2	2	27360	2	1	52	C	
APR 20,82	APR 19,82	800	830	30	430	1	4.3	2	27363	2	1	110		
APR 21,82	APR 20,82	830	800	1630	1830	1	13.4	2	27366	2	1	97		
MAY 3,82	MAY 2,82	900	1000	1500	1600	1	3.8	1	27367	2	1	94	C	
MAY 6,82	MAY 5,82	800	830	500	700	1	3.6	1	27370	2	1	93		
MAY 8,82	MAY 7,82	800	900	1530	1630	1	6.3	1	27373	2	1	94		J
MAY 9,82	MAY 8,82	900	900	600	1300	1	1.2	1	27376	2	1	13	E	N
MAY 17,82	MAY 16,82	900	900	1800	2000	1	1.4	1	27379	2	1	78		
MAY 18,82	MAY 17,82	900	900	730	900	1	0.8	1	27382	2	1	38	CA	N
MAY 19,82	MAY 18,82	900	830	900	930	1	0.6	1	27385	2	1	51		
MAY 20,82	MAY 19,82	830	830	1830	1900	1	4.2	1	27388	2	1	92		
MAY 21,82	MAY 20,82	830	830	1300	1730	1	7.7	1	27391	2	1	98		
MAY 24,82	MAY 23,82	900	900	1430	2330	1	9.0	1	27394	2	1	93		
MAY 28,82	MAY 27,82	800	900	530	800	1	3.0	1	27397	2	1	88		M
MAY 29,82	MAY 28,82	900	900	1130	1400	1	1.7	1	27400	2	1	87		
MAY 31,82	MAY 30,82	900	830	1330	2400	1	31.7	1	27403	2	1	101		
JUN 2,82	JUN 1,82	900	830	830	1630	1	4.9	1	27406	2	1	93	A	
JUN 11,82	JUN 10,82	900	900	1500	2100	1	28.2	1	27411	2	1	110		T
JUN 14,82	JUN 12,82	900	830	500	600	1	2.2	1	27414	2	1	7		NZ
JUN 15,82	JUN 14,82	830	830	500	600	1	0.4	1	27417	2	1	77		
JUN 16,82	JUN 15,82	830	745	1400	2300	1	34.8	1	27418	2	1	104		
JUN 19,82	JUN 18,82	800	900	1800	900	1	15.1	1	27421	2	1	94		
JUN 20,82	JUN 19,82	900	900	900	1500	1	11.8	1	27424	2	1	88		
JUN 21,82	JUN 20,82	900	800	2200	300	1	8.2	1	27427	2	1	100		
JUN 22,82	JUN 21,82	800	815	1500	1600	1	4.2	1	27432	2	1	116		C
JUN 23,82	JUN 22,82	815	735	1300	1500	1	6.2	1	27433	2	1	98		
JUN 25,82	JUN 24,82	800	815	400	900	1	3.4	1	27438	2	1	119		
JUN 26,82	JUN 25,82	815	900	1500	2000	1	8.6	1	27441	2	1	90		
JUN 30,82	JUN 29,82	800	900	1000	1030	1	0.3	1	27444	2	1	52	E	
JUL 1,82	JUN 30,82	900	900	1630	1830	1	3.2	1	27445	2	1	95		J
JUL 3,82	JUL 2,82	900	900	2100	2200	1	0.6	1	27448	2	1	26	E	N
JUL 8,82	JUL 7,82	830	830	1300	1400	1	1.6	1	27453	2	1	97		
JUL 11,82	JUL 10,82	900	900	700	800	1	0.3	1	27456	2	1	208	F	N
JUL 12,82	JUL 11,82	900	830	1130	1430	1	20.4	1	27460	2	1	93	F	
JUL 13,82	JUL 12,82	830	830	830	1100	1	0.4	1	27461	2	1	19	E	N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #08 PAGE : 2

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
APR 11,82	APR 10,82	U	115.0	******	******	3.98	0.1328	4.75	1.28
APR 12,82	APR 11,82		250.0	51.5	3.97	3.99	0.1272	5.20	0.59
APR 13,82	APR 12,82		525.0	38.5	4.10	4.15	0.0990	3.10	0.80
APR 14,82	APR 13,82		330.0	42.7	4.04	4.12	0.1082	4.15	0.65
APR 17,82	APR 16,82		540.0	68.0	3.82	3.92	0.1672	5.95	1.14
APR 18,82	APR 17,82		40.0	******	******	4.33	0.0804	4.15	0.56
APR 20,82	APR 19,82		305.0	38.1	4.15	4.30	0.0876	3.20	1.05
APR 21,82	APR 20,82		840.0	30.0	4.18	4.29	0.0786	2.75	0.35
MAY 3,82	MAY 2,82		230.0	39.0	4.09	4.23	0.1030	5.90	0.32
MAY 6,82	MAY 5,82		215.0	******	3.75	3.80	0.2048	10.30	1.33
MAY 8,82	MAY 7,82		380.0	22.8	4.37	4.93	0.0480	4.00	0.55
MAY 9,82	MAY 8,82	U	10.0	******	******	******	******	******	******
MAY 17,82	MAY 16,82		70.0	******	******	4.09	0.1092	5.25	0.30
MAY 18,82	MAY 17,82	U	20.0	******	******	3.85	0.2034	******	******
MAY 19,82	MAY 18,82		20.0	******	******	3.35	0.5840	******	******
MAY 20,82	MAY 19,82		250.0	34.7	4.08	4.27	0.1002	3.60	0.54
MAY 21,82	MAY 20,82		485.0	11.0	4.48	4.75	******	1.20	0.06
MAY 24,82	MAY 23,82		540.0	29.8	4.12	4.27	0.1016	2.70	0.34
MAY 28,82	MAY 27,82		170.0	37.9	3.99	4.19	0.1016	2.70	0.57
MAY 29,82	MAY 28,82		95.0	******	******	4.23	0.0946	2.50	0.43
MAY 31,82	MAY 30,82		2070.0	46.6	3.93	4.01	0.1282	4.40	0.34
JUN 2,82	JUN 1,82		295.0	65.0	3.81	3.92	0.1584	6.15	0.75
JUN 11,82	JUN 10,82		1990.0	58.0	3.80	3.81	0.1468	5.95	0.47
JUN 14,82	JUN 12,82	U	10.0	******	******	******	******	******	******
JUN 15,82	JUN 14,82		20.0	******	******	4.16	0.0932	******	******
JUN 16,82	JUN 15,82		2340.0	28.8	4.13	4.31	0.1124	2.50	0.31
JUN 19,82	JUN 18,82		910.0	35.0	4.09	4.26	0.0764	2.70	0.60
JUN 20,82	JUN 19,82		670.0	24.3	4.24	4.26	0.0698	2.05	0.19
JUN 21,82	JUN 20,82		530.0	20.1	4.38	4.46	0.0516	1.70	0.39
JUN 22,82	JUN 21,82		315.0	11.5	4.59	4.79	0.0332	1.00	0.09
JUN 23,82	JUN 22,82		390.0	8.4	4.56	4.78	0.0276	0.45	0.09
JUN 25,82	JUN 24,82		260.0	33.6	4.22	4.32	0.0792	3.50	0.63
JUN 26,82	JUN 25,82		500.0	15.0	4.43	4.61	0.0428	1.40	0.18
JUN 30,82	JUN 29,82		10.0	******	******	******	******	******	******
JUL 1,82	JUN 30,82		195.0	9.1	4.41	4.87	0.0288	0.95	0.06
JUL 3,82	JUL 2,82	U	10.0	******	******	******	******	******	******
JUL 8,82	JUL 7,82		100.0	57.0	******	4.16	0.1168	9.05	0.97
JUL 11,82	JUL 10,82		40.0	******	******	3.41	0.4880	******	******
JUL 12,82	JUL 11,82		1220.0	39.9	4.02	4.11	0.1114	4.45	0.40
JUL 13,82	JUL 12,82	U	5.0	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #08 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
APR 11,82	APR 10,82	0.14	0.16	0.025	0.030	0.085	1.060	0.1047
APR 12,82	APR 11,82	<W 0.01	0.11	0.010	0.060	0.045	0.750	0.1023
APR 13,82	APR 12,82	0.43	0.16	0.035	0.030	0.040	0.450	0.0708
APR 14,82	APR 13,82	0.31	0.19	0.085	0.025	0.045	0.580	0.0759
APR 17,82	APR 16,82	0.40	0.32	0.060	0.035	0.130	0.730	0.1202
APR 18,82	APR 17,82	******	0.36	******	******	******	******	0.0468
APR 20,82	APR 19,82	0.53	0.15	0.065	0.030	0.035	0.650	0.0501
APR 21,82	APR 20,82	0.07	0.06	0.010	<T 0.010	0.020	0.256	0.0513
MAY 3,82	MAY 2,82	0.52	0.08	0.100	0.135	0.045	0.630	0.0589
MAY 6,82	MAY 5,82	0.99	0.12	0.235	0.060	0.060	1.200	0.1585
MAY 8,82	MAY 7,82	0.82	0.26	0.150	U 0.265	0.165	0.730	0.0117
MAY 9,82	MAY 8,82	******	******	******	******	******	******	******
MAY 17,82	MAY 16,82	******	0.14	******	******	******	******	0.0813
MAY 18,82	MAY 17,82	******	******	******	******	******	******	0.1413
MAY 19,82	MAY 18,82	******	******	******	******	******	******	0.4467
MAY 20,82	MAY 19,82	0.20	0.09	0.040	0.095	<T 0.010	0.450	0.0537
MAY 21,82	MAY 20,82	0.06	<W 0.01	0.005	<T 0.015	0.025	0.078	0.0178
MAY 24,82	MAY 23,82	0.06	0.04	0.005	0.050	0.045	0.202	0.0537
MAY 28,82	MAY 27,82	0.08	0.01	0.010	0.020	0.015	0.168	0.0646
MAY 29,82	MAY 28,82	******	<W 0.01	******	******	******	0.162	0.0589
MAY 31,82	MAY 30,82	0.02	0.04	<W 0.005	<T 0.010	<W 0.005	0.242	0.0977
JUN 2,82	JUN 1,82	0.17	U 0.42	0.025	0.040	U 0.270	0.590	0.1202
JUN 11,82	JUN 10,82	0.15	0.08	0.005	0.030	0.015	0.500	0.1549
JUN 14,82	JUN 12,82	******	******	******	******	******	******	******
JUN 15,82	JUN 14,82	******	******	******	******	******	******	0.0692
JUN 16,82	JUN 15,82	0.03	0.07	0.005	0.065	<T 0.005	0.212	0.0490
JUN 19,82	JUN 18,82	0.09	0.12	0.015	0.105	0.040	0.330	0.0550
JUN 20,82	JUN 19,82	<W 0.01	0.03	<W 0.005	<T 0.010	<W 0.005	0.104	0.0550
JUN 21,82	JUN 20,82	0.12	0.02	0.015	0.050	<T 0.005	0.390	0.0347
JUN 22,82	JUN 21,82	0.02	0.02	<W 0.005	<W 0.005	<T 0.005	0.120	0.0162
JUN 23,82	JUN 22,82	<T 0.01	0.01	<W 0.005	<W 0.005	<T 0.005	0.026	0.0166
JUN 25,82	JUN 24,82	0.27	0.08	0.080	0.095	0.050	0.570	0.0479
JUN 26,82	JUN 25,82	0.03	0.01	0.025	0.035	0.045	0.222	0.0245
JUN 30,82	JUN 29,82	******	******	******	******	******	******	******
JUL 1,82	JUN 30,82	0.16	0.01	0.025	0.025	<T 0.005	0.068	0.0135
JUL 3,82	JUL 2,82	******	******	******	******	******	******	******
JUL 8,82	JUL 7,82	******	0.31	******	******	******	******	0.0692
JUL 11,82	JUL 10,82	******	******	******	******	******	******	0.3890
JUL 12,82	JUL 11,82	0.19	0.11	0.035	0.035	0.065	0.460	0.0776
JUL 13,82	JUL 12,82	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #08 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JUL 18,82	JUL 17,82	****	900	1500	1600	1	3.2	1	27464	2	1	99		
JUL 19,82	JUL 18,82	900	815	1600	1730	1	16.4	1	27467	2	1	99		
JUL 26,82	JUL 25,82	800	800	1000	1015	1	0.1	1	27473	2	1	78	E	
JUL 28,82	JUL 27,82	800	830	2100	300	1	7.6	1	27476	2	1	98		JM
JUL 29,82	JUL 28,82	830	800	1300	1500	1	3.0	1	27479	2	1	80		
JUL 31,82	JUL 30,82	800	800	1900	2130	1	4.0	1	27482	2	1	95		
AUG 2,82	AUG 1,82	800	1000	930	1000	1	1.0	1	27485	2	1	124		N
AUG 3,82	AUG 2,82	1000	815	1000	1200	1	4.6	1	27488	2	1	86		JHCM
AUG 4,82	AUG 3,82	800	800	1700	2200	1	4.0	1	27491	2	1	95		J
AUG 5,82	AUG 4,82	800	800	1500	1530	1	0.5	1	27495	2	1	31	E	N
AUG 9,82	AUG 8,82	800	800	1330	2030	1	2.8	1	27498	2	1	61		
AUG 10,82	AUG 9,82	800	800	730	745	1	****	1	27501	2	1	****	E	
AUG 11,82	AUG 10,82	800	800	1000	1030	1	0.2	1	27504	2	1	39	E	N
AUG 14,82	AUG 13,82	800	800	630	700	1	1.0	1	27507	2	1	101		
AUG 20,82	AUG 19,82	800	800	1100	1735	1	13.6	1	27510	2	1	96		
AUG 23,82	AUG 22,82	800	830	1200	330	1	20.4	1	27516	2	1	93		
AUG 25,82	AUG 24,82	830	830	300	830	1	10.5	1	27520	2	1	99		HM
AUG 26,82	AUG 25,82	830	900	830	1000	1	1.0	1	27522	2	1	46		N
AUG 28,82	AUG 27,82	800	1130	1130	1230	1	9.5	1	27524	2	1	100		
AUG 29,82	AUG 28,82	1130	800	1130	1400	1	3.2	1	27526	2	1	41		N
AUG 31,82	AUG 30,82	800	800	1820	1830	1	0.2	1	27528	2	1	****	E	
SEP 2,82	SEP 1,82	800	800	1900	2100	1	10.0	1	27530	2	1	95		
SEP 3,82	SEP 2,82	800	800	1630	1900	1	16.4	1	27532	2	1	99		HM
SEP 4,82	SEP 3,82	800	800	900	1100	1	9.4	1	27534	2	1	86		HM
SEP 6,82	SEP 5,82	800	900	2330	800	1	30.0	1	27536	2	1	72		
SEP 14,82	SEP 13,82	830	830	700	830	1	0.6	1	27538	2	1	104		
SEP 15,82	SEP 14,82	830	830	100	400	1	1.8	1	27540	2	1	82		
SEP 16,82	SEP 15,82	830	850	2230	2330	1	2.6	1	27541	2	1	69		
SEP 18,82	SEP 17,82	830	830	2230	630	1	18.8	1	27543	2	1	****	G	
SEP 21,82	SEP 20,82	830	830	1530	1700	1	14.0	1	27545	2	1	96		
SEP 25,82	SEP 24,82	830	830	2300	300	1	2.8	1	27547	2	1	80		
SEP 27,82	SEP 26,82	830	800	530	800	1	1.6	1	27549	2	1	43		N
SEP 28,82	SEP 27,82	810	830	1100	1600	1	9.1	1	27551	2	1	96		HM
OCT 1,82	SEP 30,82	830	830	750	830	1	5.7	1	27553	2	1	97		
OCT 2,82	OCT 1,82	830	830	900	1100	1	2.6	1	27555	2	1	87	A	
OCT 4,82	OCT 3,82	830	830	930	1030	1	0.8	1	27557	2	1	78		
OCT 7,82	OCT 6,82	830	1000	2400	2430	1	3.2	1	27559	2	1	90		
OCT 8,82	OCT 7,82	1000	800	1000	1600	1	6.0	1	27561	2	1	94		
OCT 9,82	OCT 8,82	800	900	1430	1800	1	10.0	1	27563	2	1	98		H
OCT 11,82	OCT 10,82	900	900	530	800	1	1.8	1	27565	2	1	91		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #08 PAGE : 5

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
JUL 18,82	JUL 17,82		205.0	33.9	******		4.18		0.0886		4.15		0.40
JUL 19,82	JUL 18,82		1050.0	21.1	4.30		4.44		0.0464		1.30		0.20
JUL 26,82	JUL 25,82		5.0	******	******		******		******		******		******
JUL 28,82	JUL 27,82		480.0	4.7	4.64		5.06		0.0296		0.20		0.07
JUL 29,82	JUL 28,82		155.0	14.5	******		4.66		0.0452		0.45		0.11
JUL 31,82	JUL 30,82		245.0	93.0	3.64		3.64		0.2360		8.70		1.49
AUG 2,82	AUG 1,82		80.0	******	******	U	6.07		0.0402		1.75		0.43
AUG 3,82	AUG 2,82		255.0	8.5	4.51	U	5.87	U	0.4980		0.60		0.20
AUG 4,82	AUG 3,82		245.0	20.3	4.20		4.53		0.0490		2.05		0.41
AUG 5,82	AUG 4,82	U	10.0	******	******		******		******		******		******
AUG 9,82	AUG 8,82		110.0	******	******		3.86		0.1494		6.75		0.35
AUG 10,82	AUG 9,82		5.0	******	******		******		******		******		******
AUG 11,82	AUG 10,82	U	5.0	******	******		******		******		******		******
AUG 14,82	AUG 13,82		65.0	******	******		4.73		0.0422		1.70		0.23
AUG 20,82	AUG 19,82		845.0	29.5	4.18		4.29		0.0712		4.10		0.51
AUG 23,82	AUG 22,82		1225.0	25.5	4.19		4.21		0.0752		2.35		0.37
AUG 25,82	AUG 24,82		670.0	9.4	4.55		4.70		0.0398		0.65		0.15
AUG 26,82	AUG 25,82	U	30.0	******	******		4.69		0.0370		0.30		0.09
AUG 28,82	AUG 27,82		610.0	12.5	4.49		4.61		0.0540		1.40		0.18
AUG 29,82	AUG 28,82	U	85.0	******	******		5.28		0.0320		0.15	<W	0.01
AUG 31,82	AUG 30,82		******	******	******		******		******		******		******
SEP 2,82	SEP 1,82		615.0	44.6	3.99		3.96		0.1310		4.25		0.53
SEP 3,82	SEP 2,82		1045.0	4.8	4.86		4.97		0.0334		0.35		0.07
SEP 4,82	SEP 3,82		520.0	2.7	5.15		5.21		0.0360		0.10	<W	0.01
SEP 6,82	SEP 5,82		1395.0	14.8	4.47		4.49		0.0630		1.40		0.19
SEP 14,82	SEP 13,82		40.0	******	******		4.21		0.0786		3.15		0.43
SEP 15,82	SEP 14,82		95.0	29.9	******		4.25		0.0764		3.20		0.39
SEP 16,82	SEP 15,82		115.0	9.3	******		4.65		0.0426		0.70		0.11
SEP 18,82	SEP 17,82		815.0	14.6	4.40		4.38		0.0582		1.25		0.20
SEP 21,82	SEP 20,82		870.0	28.5	4.21		4.16		0.0842		2.70		0.49
SEP 25,82	SEP 24,82		145.0	89.0	******		3.66		0.2268		7.10		1.67
SEP 27,82	SEP 26,82	U	45.0	******	******		4.20		0.0756		1.70		0.41
SEP 28,82	SEP 27,82		565.0	6.4	4.91		4.90		0.0318		0.40		0.56
OCT 1,82	SEP 30,82		355.0	38.5	4.03		4.05		0.1112		4.05		0.47
OCT 2,82	OCT 1,82		145.0	23.4	******		4.26		0.0670		3.10		0.20
OCT 4,82	OCT 3,82		40.0	******	******		3.43		0.4880		16.00		2.67
OCT 7,82	OCT 6,82		186.0	******	3.40		3.36		0.4896		24.75		2.63
OCT 8,82	OCT 7,82		364.0	98.0	3.63		3.63		0.2756		9.75		1.02
OCT 9,82	OCT 8,82		630.0	23.6	4.62		4.63		0.0602		3.15		0.77
OCT 11,82	OCT 10,82		105.0	******	******		3.76		0.1840		7.60		0.66

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #08 PAGE : 6

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JUL 18,82	JUL 17,82	0.17	0.19	0.020	0.160	0.080	******	0.0661
JUL 19,82	JUL 18,82	0.04	0.03	0.015	<T 0.010	0.020	0.142	0.0363
JUL 26,82	JUL 25,82	******	******	******	******	******	******	******
JUL 28,82	JUL 27,82	0.05	0.03	<W 0.005	<W 0.005	<T 0.005	0.044	0.0087
JUL 29,82	JUL 28,82	0.04	0.08	0.010	0.035	0.015	******	0.0219
JUL 31,82	JUL 30,82	0.82	0.34	0.150	0.105	0.020	0.520	0.2291
AUG 2,82	AUG 1,82	******	0.24	******	******	******	******	U 0.0009
AUG 3,82	AUG 2,82	0.20	0.10	0.050	0.105	0.055	0.390	U 0.0013
AUG 4,82	AUG 3,82	0.16	0.15	0.020	0.110	0.050	0.670	0.0295
AUG 5,82	AUG 4,82	******	******	******	******	******	******	******
AUG 9,82	AUG 8,82	0.07	0.04	0.015	0.045	0.015	0.450	0.1380
AUG 10,82	AUG 9,82	******	******	******	******	******	******	******
AUG 11,82	AUG 10,82	******	******	******	******	******	******	******
AUG 14,82	AUG 13,82	******	0.30	******	******	******	0.314	0.0186
AUG 20,82	AUG 19,82	0.48	0.08	0.090	0.045	0.025	0.700	0.0513
AUG 23,82	AUG 22,82	0.06	0.06	<W 0.005	0.090	<T 0.010	0.276	0.0617
AUG 25,82	AUG 24,82	0.16	0.02	0.025	0.045	<T 0.010	0.112	0.0200
AUG 26,82	AUG 25,82	******	0.29	******	******	******	******	0.0204
AUG 28,82	AUG 27,82	0.09	0.19	0.040	0.085	0.085	0.244	0.0245
AUG 29,82	AUG 28,82	******	0.14	******	******	******	0.078	0.0052
AUG 31,82	AUG 30,82	******	******	******	******	******	******	******
SEP 2,82	SEP 1,82	0.06	0.08	0.015	<T 0.015	<T 0.010	0.390	0.1096
SEP 3,82	SEP 2,82	0.01	0.04	0.005	<T 0.005	<T 0.005	0.122	0.0107
SEP 4,82	SEP 3,82	<T 0.01	0.07	0.005	0.030	0.020	0.038	0.0062
SEP 6,82	SEP 5,82	0.05	0.05	0.015	0.040	0.015	0.208	0.0324
SEP 14,82	SEP 13,82	******	0.41	******	******	******	******	0.0617
SEP 15,82	SEP 14,82	0.16	0.23	0.020	0.125	0.105	******	0.0562
SEP 16,82	SEP 15,82	0.03	0.15	0.005	0.050	0.060	******	0.0224
SEP 18,82	SEP 17,82	0.06	0.07	0.015	0.020	0.015	0.096	0.0417
SEP 21,82	SEP 20,82	0.10	0.14	0.020	0.010	0.035	0.480	0.0692
SEP 25,82	SEP 24,82	0.30	0.39	0.050	0.265	0.145	1.040	0.2188
SEP 27,82	SEP 26,82	******	0.29	******	******	******	******	0.0631
SEP 28,82	SEP 27,82	<W 0.01	0.11	<W 0.005	0.005	0.010	0.054	0.0126
OCT 1,82	SEP 30,82	0.26	0.15	0.030	0.030	0.095	0.510	0.0891
OCT 2,82	OCT 1,82	0.05	0.14	0.005	0.050	0.075	0.520	0.0550
OCT 4,82	OCT 3,82	******	0.71	******	******	******	******	0.3715
OCT 7,82	OCT 6,82	U 2.00	0.52	U 0.415	0.190	0.085	U 2.850	0.4365
OCT 8,82	OCT 7,82	0.27	0.30	0.040	0.080	0.090	0.900	0.2344
OCT 9,82	OCT 8,82	0.74	0.06	0.075	0.050	0.015	0.978	0.0234
OCT 11,82	OCT 10,82	0.47	0.32	0.050	0.155	0.165	******	0.1738

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #08 PAGE : 7

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
OCT 12,82	OCT 11,82	900	900	800	900	1	1.0	1	27567	2	1	124		N
OCT 13,82	OCT 12,82	900	900	600	900	1	4.2	1	27569	2	1	70		
OCT 14,82	OCT 13,82	900	830	1500	600	1	5.2	1	27571	2	1	91		
OCT 15,82	OCT 14,82	830	750	1100	2300	1	19.3	1	27573	2	1	96	FJ	M
OCT 16,82	OCT 15,82	750	930	730	930	3	1.2	1	27575	2	1	201		NHM
OCT 18,82	OCT 17,82	750	750	630	800	1	1.0	1	27577	2	1	93		
OCT 19,82	OCT 18,82	750	900	730	800	1	0.8	1	27579	2	1	97	A	
OCT 21,82	OCT 20,82	800	800	1330	1730	1	10.0	1	27581	2	1	95		
NOV 1,82	OCT 31,82	915	915	1930	2230	1	1.0	1	27583	2	1	62	CJ	
NOV 2,82	NOV 1,82	800	800	1430	800	1	4.8	1	27585	2	1	97	FJ	
NOV 3,82	NOV 2,82	800	800	2230	200	1	10.8	1	27587	2	1	96	FJ	
NOV 4,82	NOV 3,82	800	800	2230	800	1	8.8	1	27590	2	1	101		
NOV 5,82	NOV 4,82	800	800	800	1000	1	13.2	1	27593	2	1	98	J	
NOV 6,82	NOV 5,82	800	1500	1530	2100	2	16.9	2	27596	2	1	59	FJL	HM
NOV 11,82	NOV 10,82	800	830	100	500	1	2.4	1	27600	2	1	100		
NOV 12,82	NOV 11,82	830	800	1630	530	1	19.8	1	27603	2	1	95		
NOV 13,82	NOV 12,82	800	830	930	2330	1	15.2	1	27606	2	1	88		
NOV 15,82	NOV 14,82	830	800	1500	300	2	4.9	2	27609	2	1	31		N
NOV 21,82	NOV 20,82	900	900	900	900	1	23.4	1	27616	2	1	91		
NOV 22,82	NOV 21,82	900	800	1430	1500	4	0.8	1	27619	2	1	78		
NOV 24,82	NOV 23,82	800	800	1330	300	3	15.7	2	27622	2	1	91		
NOV 25,82	NOV 24,82	800	800	800	800	2	0.5	2	27625	2	1	****	EK	
NOV 26,82	NOV 25,82	800	800	600	800	2	1.8	2	27628	2	1	52		
NOV 27,82	NOV 26,82	800	800	800	2100	2	1.9	2	27631	2	1	28		N
NOV 29,82	NOV 28,82	800	800	1800	800	1	10.4	2	27634	2	1	97		
NOV 30,82	NOV 29,82	800	800	800	800	1	12.2	2	27637	2	1	93		
DEC 1,82	NOV 30,82	800	800	30	200	1	0.8	2	27640	2	1	107		
DEC 3,82	DEC 2,82	800	800	1500	800	1	12.6	2	27643	2	1	97		
DEC 4,82	DEC 3,82	800	800	800	2400	1	3.8	2	27646	2	1	117		
DEC 5,82	DEC 4,82	800	800	600	800	1	1.4	2	27649	2	1	72		
DEC 6,82	DEC 5,82	800	800	800	800	1	28.6	2	27652	2	1	97		
DEC 7,82	DEC 6,82	800	800	800	2400	3	1.1	2	27655	2	1	120		N
DEC 9,82	DEC 8,82	800	800	1200	2400	2	3.8	2	27658	2	1	36		N
DEC 11,82	DEC 10,82	800	800	800	2400	2	4.7	2	27661	2	1	28	C	N
DEC 12,82	DEC 11,82	800	800	1700	200	2	0.6	2	27664	2	1	64	C	
DEC 15,82	DEC 14,82	800	800	1200	1800	*	****	2	27667	2	1	****	EK	
DEC 16,82	DEC 15,82	800	800	1200	800	3	16.9	2	27670	2	1	78		
DEC 17,82	DEC 16,82	800	800	800	2000	2	2.5	2	27673	2	1	46		N
DEC 19,82	DEC 18,82	800	800	****	****	2	1.4	2	27676	2	1	27		N
DEC 20,82	DEC 19,82	800	800	800	800	2	4.1	2	27679	2	1	29		N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #08 PAGE : 8

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
OCT 12,82	OCT 11,82		80.0	******	******	3.68	0.2286		9.60		1.35
OCT 13,82	OCT 12,82		191.0	******	4.26	4.20	0.0808		2.10		0.56
OCT 14,82	OCT 13,82		305.0	17.1	4.49	4.41	0.0572		1.30		0.36
OCT 15,82	OCT 14,82		1190.0	4.9	5.02	5.06	0.0330		0.35		0.04
OCT 16,82	OCT 15,82		155.0	******	******	4.94	0.0390	<T	0.05	<W	0.01
OCT 18,82	OCT 17,82		60.0	******	******	4.84	0.0390		0.05		0.33
OCT 19,82	OCT 18,82		50.0	******	******	3.97	0.1192		4.40		0.63
OCT 21,82	OCT 20,82		610.0	24.6	4.29	4.23	0.0808		2.60		0.30
NOV 1,82	OCT 31,82		40.0	******	******	4.05	0.1066		5.10		0.86
NOV 2,82	NOV 1,82		300.0	******	4.02	3.99	0.1152		3.00		0.76
NOV 3,82	NOV 2,82		670.0	33.0	4.12	4.08	0.0962		2.75		0.62
NOV 4,82	NOV 3,82		575.0	6.8	******	4.78	0.0356		0.25		0.17
NOV 5,82	NOV 4,82		830.0	12.8	******	4.50	0.0502		1.00		0.23
NOV 6,82	NOV 5,82		640.0	7.4	4.80	4.89	0.0370		0.50		0.10
NOV 11,82	NOV 10,82		155.0	******	******	3.67	0.2160		6.05		1.58
NOV 12,82	NOV 11,82		1215.0	39.4	4.05	4.02	0.1010		3.20		0.69
NOV 13,82	NOV 12,82		860.0	24.0	4.24	4.25	0.0642		2.40		0.22
NOV 15,82	NOV 14,82	U	100.0	******	******	4.23	0.0698		1.00		0.61
NOV 21,82	NOV 20,82		1375.0	29.0	4.14	4.15	0.0958		2.65		0.35
NOV 22,82	NOV 21,82		40.0	******	******	4.38	0.0618		2.10		0.16
NOV 24,82	NOV 23,82		920.0	8.8	4.67	4.70	0.0428		0.45		0.13
NOV 25,82	NOV 24,82		******	******	******	******	******		******		******
NOV 26,82	NOV 25,82		60.0	******	******	4.55	0.0450		0.45		0.54
NOV 27,82	NOV 26,82	U	35.0	******	******	4.17	0.0882		2.65		1.13
NOV 29,82	NOV 28,82		650.0	21.0	4.32	4.24	0.0736		1.50		0.29
NOV 30,82	NOV 29,82		730.0	16.5	4.38	4.38	0.0624		1.35		0.14
DEC 1,82	NOV 30,82		55.0	******	******	3.78	0.1774		4.70		1.43
DEC 3,82	DEC 2,82		790.0	21.0	4.30	4.34	0.0802		1.75		0.20
DEC 4,82	DEC 3,82		285.0	20.0	4.32	4.35	0.0770		1.65		0.24
DEC 5,82	DEC 4,82		65.0	******	******	5.02	0.0320		0.70		0.06
DEC 6,82	DEC 5,82		1795.0	15.5	4.48	4.51	0.0656		1.20		0.16
DEC 7,82	DEC 6,82		85.0	******	******	4.31	0.0718		1.50		0.48
DEC 9,82	DEC 8,82	U	90.0	******	******	4.54	0.0464		0.40		0.37
DEC 11,82	DEC 10,82	U	85.0	******	******	4.25	0.0814		2.40		0.84
DEC 12,82	DEC 11,82		25.0	******	******	5.37	0.0196		******		******
DEC 15,82	DEC 14,82		******	******	******	******	******		******		******
DEC 16,82	DEC 15,82		855.0	14.2	4.33	4.54	0.0532		0.80		0.22
DEC 17,82	DEC 16,82	U	75.0	******	******	4.47	0.0518		1.40		0.14
DEC 19,82	DEC 18,82	U	25.0	******	******	4.49	0.0524		******		******
DEC 20,82	DEC 19,82	U	75.0	******	******	4.28	0.0732		1.00		0.67

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #08 PAGE : 9

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
OCT 12,82	OCT 11,82	******	0.31	******	******	******	******	0.2089
OCT 13,82	OCT 12,82	0.14	<T 0.01	0.005	0.010	0.010	0.438	0.0631
OCT 14,82	OCT 13,82	0.14	0.05	0.010	0.055	0.035	0.282	0.0389
OCT 15,82	OCT 14,82	0.05	<W 0.01	<W 0.005	0.010	0.020	0.056	0.0087
OCT 16,82	OCT 15,82	<W 0.01	<W 0.01	<W 0.005	<W 0.005	0.020	0.034	0.0115
OCT 18,82	OCT 17,82	******	0.09	******	******	******	******	0.0145
OCT 19,82	OCT 18,82	******	0.13	******	******	******	******	0.1072
OCT 21,82	OCT 20,82	0.27	0.31	0.045	0.040	0.160	0.238	0.0589
NOV 1,82	OCT 31,82	******	0.12	******	******	******	******	0.0891
NOV 2,82	NOV 1,82	0.21	0.10	0.025	0.090	0.065	0.228	0.1023
NOV 3,82	NOV 2,82	0.14	0.11	0.025	0.035	0.085	0.312	0.0832
NOV 4,82	NOV 3,82	0.06	0.02	0.010	0.015	0.015	0.006	0.0166
NOV 5,82	NOV 4,82	0.04	<T 0.01	0.010	0.005	<W 0.005	0.106	0.0316
NOV 6,82	NOV 5,82	0.05	<W 0.01	0.010	0.005	<W 0.005	0.144	0.0129
NOV 11,82	NOV 10,82	0.32	0.53	0.060	0.095	0.250	0.850	0.2138
NOV 12,82	NOV 11,82	0.14	0.18	0.025	0.025	0.110	0.550	0.0955
NOV 13,82	NOV 12,82	0.10	0.14	0.020	0.060	0.090	0.280	0.0562
NOV 15,82	NOV 14,82	0.14	0.17	0.020	0.060	0.100	0.126	0.0589
NOV 21,82	NOV 20,82	0.02	0.13	<W 0.005	0.015	0.030	0.210	0.0708
NOV 22,82	NOV 21,82	******	0.09	******	******	******	******	0.0417
NOV 24,82	NOV 23,82	<W 0.01	0.05	<W 0.005	<W 0.005	<W 0.005	0.010	0.0200
NOV 25,82	NOV 24,82	******	******	******	******	******	******	******
NOV 26,82	NOV 25,82	******	0.10	******	******	******	******	0.0282
NOV 27,82	NOV 26,82	******	******	******	******	******	******	0.0676
NOV 29,82	NOV 28,82	0.02	0.10	<W 0.005	0.015	0.020	0.058	0.0575
NOV 30,82	NOV 29,82	0.01	0.08	<W 0.005	0.015	0.020	0.020	0.0417
DEC 1,82	NOV 30,82	******	0.34	******	******	******	******	0.1660
DEC 3,82	DEC 2,82	0.03	0.14	0.010	<T 0.010	0.060	0.070	0.0457
DEC 4,82	DEC 3,82	0.07	0.15	0.005	<T 0.010	0.055	0.088	0.0447
DEC 5,82	DEC 4,82	0.11	0.22	0.015	0.170	0.155	******	0.0095
DEC 6,82	DEC 5,82	0.03	0.13	0.010	0.020	0.040	0.074	0.0309
DEC 7,82	DEC 6,82	0.10	0.10	0.010	0.015	0.040	******	0.0490
DEC 9,82	DEC 8,82	0.13	0.15	0.015	0.010	<T 0.010	0.014	0.0288
DEC 11,82	DEC 10,82	******	0.19	******	******	******	0.570	0.0562
DEC 12,82	DEC 11,82	******	******	******	******	******	******	0.0043
DEC 15,82	DEC 14,82	******	******	******	******	******	******	******
DEC 16,82	DEC 15,82	0.02	0.03	<W 0.005	<W 0.005	0.010	0.038	0.0288
DEC 17,82	DEC 16,82	0.05	0.09	<W 0.005	0.030	0.045	******	0.0331
DEC 19,82	DEC 18,82	******	******	******	******	******	******	0.0324
DEC 20,82	DEC 19,82	0.08	0.13	0.015	0.015	0.060	******	0.0525

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #08 PAGE : 10

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
DEC 21,82	DEC 20,82	800	900	800	2400	2	3.1	2	27682	2	1	43		N
DEC 23,82	DEC 22,82	800	800	1000	1400	2	1.1	2	27685	2	1	29		N
DEC 24,82	DEC 23,82	800	900	1800	300	1	11.0	2	27688	2	1	91		
DEC 25,82	DEC 24,82	900	900	1600	900	1	17.9	2	27691	2	1	101		
DEC 26,82	DEC 25,82	900	900	900	1300	1	2.5	2	27694	2	1	111		
DEC 28,82	DEC 27,82	900	900	****	****	1	13.6	2	27698	2	1	84		
DEC 29,82	DEC 28,82	900	930	1600	1900	3	12.8	2	27701	2	1	90		
DEC 30,82	DEC 29,82	930	930	930	1500	2	1.3	2	27704	2	1	15		N
DEC 31,82	DEC 30,82	930	800	1200	1800	2	1.4	2	27707	2	1	37		N
JAN 1,83	DEC 31,82	800	900	****	****	2	2.8	2	27710	2	1	13		N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #08 PAGE : 11

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 21,82	DEC 20,82	U	86.0	******	******	4.28	0.0726	0.45	0.72
DEC 23,82	DEC 22,82	U	21.0	******	******	4.58	0.0478	******	******
DEC 24,82	DEC 23,82		645.0	38.5	3.93	4.08	0.1118	3.30	0.52
DEC 25,82	DEC 24,82		1160.0	27.5	4.09	4.22	0.0804	2.05	0.37
DEC 26,82	DEC 25,82		178.0	******	4.42	4.67	0.0454	1.80	0.22
DEC 28,82	DEC 27,82		734.0	23.0	4.19	4.34	0.0698	2.00	0.24
DEC 29,82	DEC 28,82		739.0	17.6	4.43	4.58	0.0494	2.00	0.26
DEC 30,82	DEC 29,82	U	13.0	******	******	4.81	0.0370	******	******
DEC 31,82	DEC 30,82	U	34.0	******	******	4.69	0.0384	0.85	0.19
JAN 1,83	DEC 31,82	U	25.0	******	******	4.36	0.0686	1.50	0.96

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/DAILY/AEROCHEM #08 PAGE : 12

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 21,82	DEC 20,82	******	0.11	******	******	******	0.024	0.0525
DEC 23,82	DEC 22,82	******	******	******	******	******	******	0.0263
DEC 24,82	DEC 23,82	0.19	0.13	0.020	0.025	0.050	0.266	0.0832
DEC 25,82	DEC 24,82	0.05	0.19	0.015	0.045	0.105	0.192	0.0603
DEC 26,82	DEC 25,82	0.18	0.15	0.020	0.100	0.100	0.366	0.0214
DEC 28,82	DEC 27,82	0.05	0.25	0.015	0.025	0.140	0.130	0.0457
DEC 29,82	DEC 28,82	0.17	0.12	0.030	0.025	0.035	0.374	0.0263
DEC 30,82	DEC 29,82	******	******	******	******	******	******	0.0155
DEC 31,82	DEC 30,82	******	******	******	******	******	******	0.0204
JAN 1,83	DEC 31,82	******	******	******	******	******	******	0.0437

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/SES #07 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 2,82	JAN 1,82	830	800	****	****	2	1.1	2	28079	2	1	74	C	
JAN 4,82	JAN 3,82	800	830	400	630	3	3.5	2	28080	2	1	100		
JAN 5,82	JAN 4,82	830	800	2200	200	3	10.3	2	28081	2	1	****	GE	
JAN 9,82	JAN 8,82	800	800	2200	200	2	4.1	2	28082	2	1	62		JH
JAN 11,82	JAN 10,82	800	830	1400	1800	2	18.6	2	28083	2	1	21		N
JAN 13,82	JAN 12,82	730	800	500	800	2	1.1	2	28084	2	1	58		
JAN 14,82	JAN 13,82	800	830	830	1100	2	1.1	2	28085	2	1	77	C	
JAN 16,82	JAN 15,82	800	830	2300	200	2	3.7	2	28086	2	1	57	C	
JAN 17,82	JAN 16,82	830	830	1200	1400	2	1.7	2	28087	2	1	21	C	N
JAN 23,82	JAN 22,82	830	830	400	830	2	15.5	2	28088	2	1	59	C	
JAN 24,82	JAN 23,82	830	800	830	1100	2	9.5	2	28089	2	1	44		N
JAN 29,82	JAN 28,82	800	800	100	300	2	3.7	2	28090	2	1	33	C	N
JAN 30,82	JAN 29,82	800	800	400	630	2	4.1	2	28091	2	1	64	C	
FEB 1,82	JAN 31,82	800	800	2000	2430	2	15.3	2	28092	2	1	66	C	
FEB 4,82	FEB 3,82	800	730	1300	2300	2	14.1	2	28093	2	1	86		
FEB 8,82	FEB 6,82	730	730	1300	1700	2	5.3	2	28094	2	1	46	C	NZ
FEB 9,82	FEB 8,82	730	730	1200	1500	2	1.1	2	28095	2	1	66	C	
FEB 14,82	FEB 13,82	800	800	1900	2050	2	1.1	2	28096	2	1	58	C	
FEB 19,82	FEB 18,82	800	800	400	530	2	4.5	2	28097	2	1	88		
FEB 21,82	FEB 20,82	830	830	1900	2200	2	6.1	2	28098	2	1	91		
FEB 23,82	FEB 22,82	800	730	400	530	2	1.1	2	28099	2	1	69		
FEB 27,82	FEB 26,82	800	800	1300	1700	2	0.9	2	28100	2	1	60	C	
MAR 1,82	FEB 28,82	800	830	****	****	2	2.1	2	28101	2	1	47		N
MAR 2,82	MAR 1,82	830	800	830	1500	2	3.9	2	28102	2	1	67	C	
MAR 5,82	MAR 4,82	830	815	1400	2000	2	11.5	2	28103	2	1	80		
MAR 7,82	MAR 6,82	830	845	2030	2200	2	2.5	2	28104	2	1	75		
MAR 9,82	MAR 8,82	800	815	530	815	2	1.5	2	28105	2	1	65	C	
MAR 10,82	MAR 9,82	845	845	845	1500	2	6.9	2	28106	2	1	80	C	
MAR 12,82	MAR 11,82	815	815	1000	1600	3	2.7	2	28107	2	1	****	CG	
MAR 13,82	MAR 12,82	815	845	300	630	1	17.5	2	28108	2	1	119	CD	
MAR 14,82	MAR 13,82	845	815	530	630	2	3.5	2	28109	2	1	10	C	N
MAR 17,82	MAR 16,82	815	815	1400	1630	2	12.3	2	28110	2	1	62		
MAR 22,82	MAR 21,82	815	815	1400	1700	1	10.4	2	28112	2	1	107		
MAR 26,82	MAR 25,82	730	800	1900	100	1	7.5	2	28113	2	1	72		
MAR 31,82	MAR 30,82	800	800	2100	2200	1	3.8	2	28114	2	1	129		N
APR 1,82	MAR 31,82	800	745	530	800	2	0.3	2	28115	2	1	193	C	N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/SES #07 PAGE : 2

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB	TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
JAN 2,82	JAN 1,82		135.0	39.1	******		4.23	******		4.25		0.78
JAN 4,82	JAN 3,82		575.0	35.2	4.03		4.09	0.1282		2.75		0.55
JAN 5,82	JAN 4,82		******	******	******		******	******		******		******
JAN 9,82	JAN 8,82		420.0	15.8	4.52		4.90	0.1030		0.70		0.42
JAN 11,82	JAN 10,82	U	660.0	5.9	5.26		5.24	0.0480		0.35		0.03
JAN 13,82	JAN 12,82		105.0	******	******		4.10	******		0.50		1.00
JAN 14,82	JAN 13,82		140.0	******	******		4.46	******		0.85		0.31
JAN 16,82	JAN 15,82		350.0	40.8	3.92		4.07	0.1352		0.65		1.15
JAN 17,82	JAN 16,82	U	60.0	******	******	U	6.41	******	U	2.00	U	1.02
JAN 23,82	JAN 22,82		1510.0	9.2	4.60		4.63	0.0620		0.40		0.17
JAN 24,82	JAN 23,82	U	695.0	33.0	4.12		4.21	0.1088		2.25		0.71
JAN 29,82	JAN 28,82	U	205.0	******	******		3.90	******		3.95		1.46
JAN 30,82	JAN 29,82		435.0	20.4	4.37		4.31	0.0972		0.85		0.55
FEB 1,82	JAN 31,82		1660.0	10.3	4.67		4.65	0.0674		0.60		0.24
FEB 4,82	FEB 3,82		2000.0	19.6	4.34		4.42	0.0792		0.65		0.48
FEB 8,82	FEB 6,82	U	405.0	38.5	4.05		4.09	0.1220		1.15		1.16
FEB 9,82	FEB 8,82		120.0	41.5	******		4.09	******		1.60		1.30
FEB 14,82	FEB 13,82		105.0	******	******		4.55	******		0.40		0.38
FEB 19,82	FEB 18,82		650.0	27.4	4.34		4.30	0.0984		1.55		0.71
FEB 21,82	FEB 20,82		920.0	19.0	4.52		4.42	0.0856		1.15		0.39
FEB 23,82	FEB 22,82		125.0	31.5	******		4.30	******		2.65		0.89
FEB 27,82	FEB 26,82		90.0	******	******		4.38	******		0.95		1.18
MAR 1,82	FEB 28,82	U	165.0	******	******		4.24	******		0.50		0.90
MAR 2,82	MAR 1,82		430.0	56.9	3.97		3.93	0.1648		3.00		1.34
MAR 5,82	MAR 4,82		1515.0	18.6	4.38		4.36	0.0840		0.40		0.53
MAR 7,82	MAR 6,82		310.0	43.3	******		3.95	0.1400		0.80		1.15
MAR 9,82	MAR 8,82		160.0	******	******		4.06	******		0.60		1.21
MAR 10,82	MAR 9,82		910.0	76.0	3.78		3.80	0.2138	U	5.20	U	1.41
MAR 12,82	MAR 11,82		295.0	58.0	******		3.94	0.1618		4.75		0.88
MAR 13,82	MAR 12,82		3440.0	47.1	3.97		4.01	0.1300		4.00		0.61
MAR 14,82	MAR 13,82	U	60.0	******	******	U	6.41	******		6.05		0.78
MAR 17,82	MAR 16,82		1265.0	12.6	4.58		4.60	0.0448		0.40		0.31
MAR 22,82	MAR 21,82		1835.0	25.8	4.26		4.28	0.0848		2.20		0.37
MAR 26,82	MAR 25,82		890.0	8.9	4.86		4.94	0.0396		0.40		0.23
MAR 31,82	MAR 30,82		805.0	47.7	4.01		4.02	0.1168		3.85		0.95
APR 1,82	MAR 31,82		95.0	46.2	******	U	6.72	0.0416		7.85		1.99

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/SES #07 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 2.82	JAN 1.82	0.51	0.27	0.115	0.270	0.190	******	0.0589
JAN 4.82	JAN 3.82	0.11	0.14	0.020	0.050	0.050	******	0.0813
JAN 5.82	JAN 4.82	******	******	******	******	******	******	******
JAN 9.82	JAN 8.82	0.31	U 0.83	0.020	U 0.900	U 0.330	U 0.232	0.0126
JAN 11.82	JAN 10.82	0.08	0.44	0.025	0.030	0.270	0.034	0.0058
JAN 13.82	JAN 12.82	******	U 0.82	******	******	******	0.086	0.0794
JAN 14.82	JAN 13.82	0.17	0.34	0.035	0.070	0.110	<T 0.002	0.0347
JAN 16.82	JAN 15.82	0.14	0.45	0.020	0.050	0.120	0.050	0.0851
JAN 17.82	JAN 16.82	******	U 0.53	******	******	******	******	U 0.0004
JAN 23.82	JAN 22.82	0.09	0.06	0.015	0.030	0.020	0.014	0.0234
JAN 24.82	JAN 23.82	0.12	0.15	0.020	0.030	0.080	0.410	0.0617
JAN 29.82	JAN 28.82	0.41	0.39	0.050	0.045	0.145	0.960	0.1259
JAN 30.82	JAN 29.82	0.25	0.29	0.020	0.015	0.180	0.106	0.0490
FEB 1.82	JAN 31.82	0.06	0.06	<T 0.005	0.015	0.025	0.044	0.0224
FEB 4.82	FEB 3.82	0.04	0.20	0.005	0.020	0.060	0.042	0.0380
FEB 8.82	FEB 6.82	0.26	0.26	0.050	0.045	0.095	0.196	0.0813
FEB 9.82	FEB 8.82	0.64	0.63	0.125	0.245	0.345	0.214	0.0813
FEB 14.82	FEB 13.82	0.14	0.22	0.015	0.050	0.125	0.032	0.0282
FEB 19.82	FEB 18.82	0.27	0.26	0.035	0.085	0.180	0.222	0.0501
FEB 21.82	FEB 20.82	0.06	0.04	<T 0.005	0.015	0.030	0.208	0.0380
FEB 23.82	FEB 22.82	0.36	0.22	0.030	0.040	0.060	0.800	0.0501
FEB 27.82	FEB 26.82	******	0.47	******	******	******	0.182	0.0417
MAR 1.82	FEB 28.82	0.38	0.44	0.035	0.020	0.155	0.020	0.0575
MAR 2.82	MAR 1.82	0.26	0.47	0.030	0.050	0.105	0.570	0.1175
MAR 5.82	MAR 4.82	0.04	0.04	<T 0.005	0.010	0.020	0.018	0.0437
MAR 7.82	MAR 6.82	0.12	0.36	0.010	0.015	0.135	U 0.002	0.1122
MAR 9.82	MAR 8.82	0.19	0.40	0.045	0.035	0.225	0.004	0.0871
MAR 10.82	MAR 9.82	0.40	0.46	0.035	0.065	0.170	0.750	0.1585
MAR 12.82	MAR 11.82	0.11	0.21	0.010	0.025	0.040	0.830	0.1148
MAR 13.82	MAR 12.82	0.17	0.24	0.020	0.040	0.125	0.440	0.0977
MAR 14.82	MAR 13.82	******	0.34	******	******	******	******	U 0.0004
MAR 17.82	MAR 16.82	0.15	0.03	0.010	<T 0.005	0.015	0.066	0.0251
MAR 22.82	MAR 21.82	0.30	0.07	0.025	0.055	0.030	0.216	0.0525
MAR 26.82	MAR 25.82	0.09	0.09	0.005	0.040	0.050	0.138	0.0115
MAR 31.82	MAR 30.82	0.75	0.38	0.090	0.030	0.180	0.318	0.0955
APR 1.82	MAR 31.82	******	0.57	******	******	******	******	U 0.0002

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
APR 3,82	APR 2,82	800	800	600	800	1	2.7	2	28116	2	1	115	C	
APR 4,82	APR 3,82	800	800	500	800	1	17.4	1	28117	2	1	****	EFKI	Y
APR 5,82	APR 4,82	800	800	800	1200	2	****	*	28118	2	1	****	CFL	Y
APR 12,82	APR 10,82	815	900	1400	1700	2	10.3	2	28119	2	1	88		Z
APR 13,82	APR 12,82	900	815	500	815	1	19.1	2	28120	2	1	64	C	
APR 14,82	APR 13,82	815	815	900	1100	1	4.6	1	28121	2	1	78		
APR 17,82	APR 16,82	800	800	2057	2300	1	1.6	1	28122	2	1	****	CG	N
APR 18,82	APR 17,82	800	815	1900	2130	1	3.2	1	28123	2	1	102		
APR 20,82	APR 19,82	830	830	****	****	1	7.0	1	28124	2	1	51		
APR 22,82	APR 20,82	830	830	****	****	4	****	*	28126	2	1	****	J	Z
MAY 3,82	MAY 2,82	800	845	1500	1600	1	0.8	1	28125	2	1	48	C	N
MAY 17,82	MAY 16,82	730	730	1600	1800	1	0.9	1	28127	2	1	112	C	
MAY 19,82	MAY 18,82	730	730	800	900	1	1.4	1	28128	2	1	83		
MAY 20,82	MAY 19,82	730	730	900	1000	1	3.2	1	28129	2	1	95		HM
MAY 21,82	MAY 20,82	730	****	1300	1430	1	4.0	1	28130	2	1	99		C
MAY 24,82	MAY 23,82	730	830	1400	1700	1	5.6	1	28131	2	1	87	C	
MAY 29,82	MAY 28,82	800	800	1300	1430	1	8.0	1	28132	2	1	106	C	
MAY 31,82	MAY 30,82	730	730	1400	1700	1	22.0	1	28133	2	1	99		
JUN 2,82	JUN 1,82	730	730	900	1100	1	7.0	1	28134	2	1	89		
JUN 11,82	JUN 10,82	730	700	1530	1700	1	41.0	1	28135	2	1	94		
JUN 13,82	JUN 12,82	730	730	500	530	1	1.2	1	28136	2	1	78	C	
JUN 14,82	JUN 13,82	730	730	1200	1300	1	2.1	1	28137	2	1	78		
JUN 16,82	JUN 15,82	730	700	1600	1800	1	31.6	1	28138	2	1	102	A	J
JUN 19,82	JUN 18,82	730	730	100	730	1	16.4	1	28139	2	1	****	EFKL	
JUN 20,82	JUN 19,82	730	800	730	1500	1	19.0	1	28140	2	1	103	FJ	
JUN 21,82	JUN 20,82	800	730	2000	2200	1	8.4	1	28141	2	1	99	FJ	
JUN 23,82	JUN 22,82	800	730	1300	1400	1	9.0	1	28142	2	1	105	FJ	
JUN 26,82	JUN 25,82	700	600	700	900	1	7.0	1	28143	2	1	95	FJ	
JUL 1,82	JUN 30,82	730	730	2100	2130	1	2.4	1	28144	2	1	87	AC	
JUL 5,82	JUL 4,82	800	800	1900	2000	1	1.6	1	28145	2	1	68	C	
JUL 12,82	JUL 11,82	730	700	1300	1430	1	24.0	1	28146	2	1	94	D	
JUL 13,82	JUL 12,82	700	700	800	1000	1	2.4	1	28147	2	1	65	C	
JUL 18,82	JUL 17,82	730	800	1300	1400	1	6.6	1	28148	2	1	85		
JUL 19,82	JUL 18,82	800	800	1300	1430	1	18.8	1	28149	2	1	104		
JUL 28,82	JUL 27,82	730	800	2100	2230	1	7.6	1	28150	2	1	86		C
JUL 29,82	JUL 28,82	800	700	1400	1530	1	6.0	1	28151	2	1	92		HC
JUL 31,82	JUL 30,82	700	700	1800	1900	1	3.6	1	28152	2	1	90	C	
AUG 3,82	AUG 2,82	700	700	715	1000	1	7.2	1	28153	2	1	90	C	JHM
AUG 4,82	AUG 3,82	700	700	1800	1900	1	2.6	1	28154	2	1	87	C	HC
AUG 9,82	AUG 8,82	730	730	1200	1430	*	3.6	1	28155	2	1	43		N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07

REMOVAL DATE	EXPOSURE DATE		VOLUME ML		CONDUCT. UMHO/CM		PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L	
APR 3,82	APR 2,82		200.0		11.6		U 4.93		U 5.19		0.0362		1.85		0.09	
APR 4,82	APR 3,82		******		******		******		******		******		******		******	
APR 5,82	APR 4,82		650.0		13.2		U 5.55		U 5.82		0.0434		2.75		0.24	
APR 12,82	APR 10,82		585.0		46.7		4.00		4.13		0.1250		4.85		0.63	
APR 13,82	APR 12,82		785.0		38.4		4.08		4.22		0.0988		3.25		0.82	
APR 14,82	APR 13,82		230.0		45.8		3.98		4.09		0.1196		4.40		0.68	
APR 17,82	APR 16,82	U	25.0		******		******		3.98		0.1518		******		******	
APR 18,82	APR 17,82		210.0		54.0		4.01		4.10		0.1220		6.25		0.85	
APR 20,82	APR 19,82		230.0		36.2		4.22		4.40		0.0692		3.60		1.11	
APR 22,82	APR 20,82		575.0		40.3		4.05		4.11		0.1066		3.65		0.52	
MAY 3,82	MAY 2,82	U	25.0		******		******		4.16		0.1128		7.30		0.63	
MAY 17,82	MAY 16,82		65.0		******		******		4.37		0.0924		5.85		0.29	
MAY 19,82	MAY 18,82		75.0		******		******	U	4.71	U	0.0490	U	8.55	U	1.35	
MAY 20,82	MAY 19,82		195.0	U	81.0	U	3.75	U	3.86	U	0.2060	U	10.00	U	1.85	
MAY 21,82	MAY 20,82		255.0		15.3		4.57		4.67		0.0386		1.30		0.05	
MAY 24,82	MAY 23,82		315.0		34.5		4.06		4.24		0.0954		3.00		0.44	
MAY 29,82	MAY 28,82		545.0		34.2		4.12		4.14		0.0938		3.00		0.44	
MAY 31,82	MAY 30,82		1410.0		29.3		4.10		4.18		0.0812		2.90		0.17	
JUN 2,82	JUN 1,82		400.0		56.5		3.94		3.93		0.1406		5.80		0.73	
JUN 11,82	JUN 10,82		2480.0		49.2		3.86		3.97		0.1348		5.00		0.40	
JUN 13,82	JUN 12,82		60.0		******		******		3.69		0.2640		10.45	U	4.20	
JUN 14,82	JUN 13,82		105.0		43.0		******		4.21		0.0908		4.55		1.07	
JUN 16,82	JUN 15,82		2085.0		29.9	U	4.65		4.17		0.0916		2.40		0.35	
JUN 19,82	JUN 18,82		******		******		******		******		******		******		******	
JUN 20,82	JUN 19,82		1255.0		22.4		4.27		4.27		0.0682		1.90		0.23	
JUN 21,82	JUN 20,82		535.0		17.8		4.49		4.54		0.0512		1.70		0.37	
JUN 23,82	JUN 22,82		610.0		9.6		4.59		4.91		0.0342		0.90		0.10	
JUN 26,82	JUN 25,82		430.0		27.2		4.18		4.26		0.0740		2.65		0.39	
JUL 1,82	JUN 30,82		135.0		******		******	U	6.65		0.0302	U	1.65		0.12	
JUL 5,82	JUL 4,82		70.0		******		******	U	5.90		0.0306		2.50		0.28	
JUL 12,82	JUL 11,82		1460.0		37.8		4.04		4.19		0.0872		3.80		0.35	
JUL 13,82	JUL 12,82		100.0		12.3		******		5.12		0.0282		0.30		0.03	
JUL 18,82	JUL 17,82		360.0		36.1		4.11		4.09	U	1.8900		4.15		0.46	
JUL 19,82	JUL 18,82		1260.0		18.3		******		4.32	U	1.1100		1.55		0.23	
JUL 28,82	JUL 27,82		420.0		5.4		******		5.30		0.0296		0.20		0.10	
JUL 29,82	JUL 28,82		355.0		6.2		******	U	6.03		0.0254		0.50		0.12	
JUL 31,82	JUL 30,82		210.0		93.0		3.70		3.66		0.2220		8.40		1.60	
AUG 3,82	AUG 2,82		420.0	U	14.5		4.63	U	5.91	U	0.0320	U	1.40	U	0.38	
AUG 4,82	AUG 3,82		145.0	U	61.5		******		4.60		0.0474		1.70		0.50	
AUG 9,82	AUG 8,82	U	100.0		50.0		******		3.94		0.1310		5.65		0.47	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
APR 3,82	APR 2,82	0.34	U 0.48	U 0.045	U 0.275	U 0.280	******	U 0.0065
APR 4,82	APR 3,82	******	******	******	******	******	******	******
APR 5,82	APR 4,82	U 0.91	0.35	0.060	0.115	0.085	0.390	U 0.0015
APR 12,82	APR 10,82	0.10	0.11	0.010	0.090	0.025	0.750	0.0741
APR 13,82	APR 12,82	0.47	0.20	0.055	0.020	0.050	0.480	0.0603
APR 14,82	APR 13,82	0.21	0.20	0.025	0.045	0.035	******	0.0813
APR 17,82	APR 16,82	******	******	******	******	******	******	0.1047
APR 18,82	APR 17,82	0.42	0.34	0.115	0.245	0.190	0.860	0.0794
APR 20,82	APR 19,82	0.95	0.20	U 0.185	U 0.190	0.070	0.630	0.0398
APR 22,82	APR 20,82	0.10	0.09	0.015	0.035	<W 0.005	0.410	0.0776
MAY 3,82	MAY 2,82	******	0.58	******	******	******	******	0.0692
MAY 17,82	MAY 16,82	******	0.35	******	******	******	******	0.0427
MAY 19,82	MAY 18,82	******	U 0.41	******	******	******	******	U 0.0195
MAY 20,82	MAY 19,82	0.64	U 0.65	0.130	U 0.230	U 0.085	U 1.200	U 0.1380
MAY 21,82	MAY 20,82	0.06	0.07	0.005	U 0.240	0.040	0.058	0.0214
MAY 24,82	MAY 23,82	0.09	0.08	0.010	0.275	0.045	0.238	0.0575
MAY 29,82	MAY 28,82	0.07	0.19	0.010	0.210	<T 0.010	0.248	0.0724
MAY 31,82	MAY 30,82	0.02	0.02	<W 0.005	<T 0.015	<T 0.010	0.150	0.0661
JUN 2,82	JUN 1,82	0.09	0.18	0.010	U 0.240	0.045	0.750	0.1175
JUN 11,82	JUN 10,82	0.08	0.09	<W 0.005	0.045	0.025	0.356	0.1072
JUN 13,82	JUN 12,82	******	U 1.10	******	******	******	******	0.2042
JUN 14,82	JUN 13,82	******	0.27	******	******	******	******	0.0617
JUN 16,82	JUN 15,82	0.04	0.08	<W 0.005	0.035	0.015	0.246	0.0676
JUN 19,82	JUN 18,82	******	******	******	******	******	******	******
JUN 20,82	JUN 19,82	0.02	0.02	<W 0.005	0.025	<T 0.005	0.200	0.0537
JUN 21,82	JUN 20,82	0.12	0.04	0.015	0.130	0.025	0.430	0.0288
JUN 23,82	JUN 22,82	0.05	U 0.09	<W 0.005	U 0.305	U 0.060	0.114	0.0123
JUN 26,82	JUN 25,82	0.07	0.06	0.010	0.065	0.035	0.520	0.0550
JUL 1,82	JUN 30,82	0.49	0.10	0.080	U 0.305	0.045	U 0.580	U 0.0002
JUL 5,82	JUL 4,82	******	U 1.12	******	******	******	******	U 0.0013
JUL 12,82	JUL 11,82	0.19	0.10	0.040	0.030	0.050	0.410	0.0646
JUL 13,82	JUL 12,82	******	0.05	******	******	******	******	0.0076
JUL 18,82	JUL 17,82	0.28	0.10	U 0.035	0.090	0.055	0.530	0.0813
JUL 19,82	JUL 18,82	0.04	0.07	0.010	U 0.075	0.020	0.180	0.0479
JUL 28,82	JUL 27,82	0.10	0.12	0.010	U 0.100	U 0.040	0.040	0.0050
JUL 29,82	JUL 28,82	U 0.42	0.22	U 0.055	U 0.160	U 0.110	0.090	U 0.0009
JUL 31,82	JUL 30,82	1.12	0.44	0.195	0.205	0.060	0.540	0.2188
AUG 3,82	AUG 2,82	0.37	0.14	0.055	0.165	0.035	U 0.920	U 0.0012
AUG 4,82	AUG 3,82	0.26	0.15	0.020	0.105	0.055	0.630	0.0251
AUG 9,82	AUG 8,82	******	0.13	******	******	******	0.380	0.1148

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
AUG 15,82	AUG 14,82	700	730	740	900	1	1.2	1	28156	2	1	71		
AUG 20,82	AUG 19,82	730	800	1130	1300	1	20.2	1	28157	2	1	103	A	
AUG 23,82	AUG 22,82	800	800	1200	1600	1	23.8	1	28158	2	1	78	FJH	
AUG 25,82	AUG 24,82	730	730	500	730	1	11.0	1	28159	2	1	104		
AUG 26,82	AUG 25,82	730	730	730	900	1	2.0	1	28160	2	1	54	AC	
SEP 1,82	AUG 30,82	730	730	300	500	1	11.0	1	28161	2	1	96		Z
SEP 2,82	SEP 1,82	730	730	2000	2130	1	10.4	1	28162	2	1	92	C	
SEP 3,82	SEP 2,82	730	700	1630	1900	1	12.0	1	28163	2	1	101		
SEP 4,82	SEP 3,82	700	730	710	930	1	16.4	1	28164	2	1	85	C	HM
SEP 6,82	SEP 5,82	700	730	2200	2330	1	20.6	1	28165	2	1	95		
SEP 15,82	SEP 13,82	730	730	630	830	1	4.6	1	28166	2	1	50	C	Z
SEP 16,82	SEP 15,82	730	730	2240	2300	1	3.2	1	28167	2	1	60	AC	
SEP 18,82	SEP 11,82	730	730	2200	2430	1	19.2	1	28168	2	1	97		Z
SEP 21,82	SEP 20,82	730	730	1530	1630	1	3.6	1	28169	2	1	95		
SEP 25,82	SEP 24,82	730	800	600	800	1	3.0	1	28170	2	1	41		N
SEP 28,82	SEP 27,82	730	730	1030	1300	1	10.6	1	28171	2	1	100		
OCT 2,82	OCT 1,82	800	730	815	1035	1	8.0	1	28172	2	1	****	G	
OCT 4,82	OCT 3,82	730	730	830	930	1	1.3	1	28173	2	1	61		
OCT 8,82	OCT 7,82	730	830	1100	1300	1	5.2	1	28174	2	1	96	C	
OCT 9,82	OCT 8,82	730	730	1400	1600	1	9.2	1	28175	2	1	98		H
OCT 11,82	OCT 10,82	730	800	500	600	1	2.0	1	28176	2	1	81	C	
OCT 12,82	OCT 11,82	700	700	1300	1400	1	1.0	1	28177	2	1	31		N
OCT 13,82	OCT 12,82	700	700	1700	1800	1	7.2	1	28178	2	1	96	D	
OCT 14,82	OCT 13,82	700	700	1515	1615	1	8.2	1	28179	2	1	97	J	
OCT 15,82	OCT 14,82	700	700	1800	2100	1	27.6	1	28180	2	1	94		HM
OCT 17,82	OCT 16,82	730	800	900	1100	3	1.2	1	28181	2	1	58	BD	
OCT 21,82	OCT 20,82	730	730	1600	1700	1	10.2	1	28182	2	1	105		
NOV 1,82	OCT 31,82	730	730	1930	2030	1	1.1	2	28183	2	1	99		
NOV 2,82	NOV 1,82	730	730	2300	130	1	5.5	2	28184	2	1	110		
NOV 3,82	NOV 2,82	730	730	730	1100	1	14.7	2	28185	2	1	99	J	
NOV 4,82	NOV 3,82	730	730	1800	2000	1	6.1	2	28186	2	1	97		HM
NOV 5,82	NOV 4,82	730	730	1100	1300	1	7.7	2	28187	2	1	85		HM
NOV 6,82	NOV 5,82	730	730	1400	1700	2	16.1	2	28188	2	1	7	FL	N
NOV 11,82	NOV 10,82	730	730	2200	2300	1	1.3	2	28189	2	1	168		N
NOV 12,82	NOV 11,82	730	730	2300	100	1	19.5	2	28190	2	1	48		N
NOV 15,82	NOV 14,82	730	730	100	300	2	14.9	2	28191	2	1	****	EFK	
NOV 21,82	NOV 20,82	730	730	830	1200	1	19.7	2	28192	2	1	96		
NOV 22,82	NOV 21,82	730	730	1300	1400	1	1.1	2	28193	2	1	63	C	
NOV 23,82	NOV 22,82	710	730	815	1200	1	14.5	2	28194	2	1	100		
NOV 29,82	NOV 28,82	730	730	530	730	1	8.3	2	28195	2	1	95		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07 PAGE : 5

REMOVAL DATE	EXPOSURE DATE		VOLUME ML		CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH4.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
AUG 15,82	AUG 14,82		55.0		******	******		4.82		0.0378		1.05		0.15
AUG 20,82	AUG 19,82		1345.0		19.0	4.28		4.57		0.0478		3.15		0.36
AUG 23,82	AUG 22,82		1205.0		25.4	4.18		4.25		0.0756		2.35		0.36
AUG 25,82	AUG 24,82		735.0		6.6	4.77		4.94		0.0394		0.50		0.11
AUG 26,82	AUG 25,82		70.0		5.3	******		U 6.06		0.0252		0.35		0.08
SEP 1,82	AUG 30,82		680.0		14.6	4.53		4.52		0.0538		1.40		0.19
SEP 2,82	SEP 1,82		615.0		35.0	4.08		4.03		0.1498		3.40		0.41
SEP 3,82	SEP 2,82		780.0		5.7	5.08		5.16		0.0392		0.55		0.10
SEP 4,82	SEP 3,82		895.0		2.3	5.26		5.35		0.0350		0.10	<W	0.01
SEP 6,82	SEP 5,82		1265.0		12.2	4.62		4.57		0.0574		1.45		0.15
SEP 15,82	SEP 13,82		150.0		******	4.21		4.19		0.0934		3.30		0.45
SEP 16,82	SEP 15,82		125.0		8.5	******		4.99		0.0402		1.15		0.13
SEP 18,82	SEP 11,82		1200.0		13.1	4.50		4.48		0.0460		1.10		0.18
SEP 21,82	SEP 20,82		220.0		28.3	4.18		4.22		0.0786		3.05		0.60
SEP 25,82	SEP 24,82	U	80.0		******	******		3.80		0.1642		5.15		1.44
SEP 28,82	SEP 27,82		680.0		7.0	4.66		4.85		0.0334		0.60		0.10
OCT 2,82	OCT 1,82		486.0		******	******		4.13		0.0948		3.60		0.36
OCT 4,82	OCT 3,82		51.0		******	******		3.47	U	0.3708		16.00		3.01
OCT 8,82	OCT 7,82		323.0		126.0	3.54		3.51		0.3396		12.00		1.55
OCT 9,82	OCT 8,82		580.0		21.5	4.64		4.82		0.0500		3.15		0.69
OCT 11,82	OCT 10,82		105.0		******	******		4.20		0.0858		4.20		0.39
OCT 12,82	OCT 11,82	U	20.0		******	******		3.52		0.3480		******		******
OCT 13,82	OCT 12,82		445.0		25.5	4.29		4.13		0.0776		2.50		0.48
OCT 14,82	OCT 13,82		515.0	U	24.4	4.34		4.40		0.0740		2.05		0.62
OCT 15,82	OCT 14,82		1670.0		4.6	4.89		5.14		0.0272		0.40		0.04
OCT 17,82	OCT 16,82		45.0		******	******		U 6.74		0.0254		0.10	<T	0.01
OCT 21,82	OCT 20,82		690.0		26.0	4.15		4.25		0.0764		2.75		0.33
NOV 1,82	OCT 31,82		70.0		******	******		4.03		0.1006		4.80		0.82
NOV 2,82	NOV 1,82		390.0		35.0	4.01		4.10		0.0974		2.45		0.67
NOV 3,82	NOV 2,82		940.0		27.5	4.14		4.15		0.0852		2.25		0.49
NOV 4,82	NOV 3,82		380.0		6.4	4.75		4.94		0.0406	<T	0.05		0.16
NOV 5,82	NOV 4,82		420.0		12.9	4.45		4.52		0.0494		1.00		0.25
NOV 6,82	NOV 5,82	U	75.0		******	******		5.09		0.0332		1.85		0.42
NOV 11,82	NOV 10,82		140.0		******	******		3.89		0.1688		6.00		1.54
NOV 12,82	NOV 11,82	U	610.0		35.0	4.14		4.16		0.1130		3.15		0.71
NOV 15,82	NOV 14,82		******		******	******		******		******		******		******
NOV 21,82	NOV 20,82		1215.0		30.0	4.16		4.18		0.0994		2.75		0.39
NOV 22,82	NOV 21,82		45.0		******	******		U 6.25	U	0.0286		2.70		0.26
NOV 23,82	NOV 22,82		935.0		8.7	4.64		4.72		0.0512		0.60		0.18
NOV 29,82	NOV 28,82		510.0		20.2	4.25		4.32		0.0718		1.60		0.31

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07 PAGE : 6

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
AUG 15,82	AUG 14,82	******	0.19	******	******	******	******	0.0151
AUG 20,82	AUG 19,82	0.36	0.06	0.070	0.140	<T 0.005	0.650	0.0269
AUG 23,82	AUG 22,82	0.08	0.06	0.020	0.080	<T 0.005	0.274	0.0562
AUG 25,82	AUG 24,82	0.05	0.04	0.015	0.050	<T 0.010	0.112	0.0115
AUG 26,82	AUG 25,82	******	0.28	******	******	******	******	U 0.0009
SEP 1,82	AUG 30,82	0.06	0.06	0.020	0.065	<T 0.010	0.184	0.0302
SEP 2,82	SEP 1,82	0.07	0.10	<W 0.005	0.100	0.030	0.316	0.0933
SEP 3,82	SEP 2,82	0.04	0.08	<W 0.005	0.070	0.025	0.192	0.0069
SEP 4,82	SEP 3,82	<W 0.01	0.06	<W 0.005	0.055	0.080	0.030	0.0045
SEP 6,82	SEP 5,82	0.05	0.07	0.010	U 0.235	0.025	0.170	0.0269
SEP 15,82	SEP 13,82	0.37	0.29	0.070	0.225	0.150	******	0.0646
SEP 16,82	SEP 15,82	0.10	0.27	0.015	0.400	0.130	0.210	0.0102
SEP 18,82	SEP 11,82	0.06	0.05	0.010	0.005	0.010	0.090	0.0331
SEP 21,82	SEP 20,82	0.25	0.22	0.050	0.110	U 0.190	0.610	0.0603
SEP 25,82	SEP 24,82	******	0.41	******	******	******	0.720	0.1585
SEP 28,82	SEP 27,82	0.03	0.10	<W 0.005	0.040	0.015	0.110	0.0141
OCT 2,82	OCT 1,82	******	0.21	******	******	******	******	0.0741
OCT 4,82	OCT 3,82	******	0.82	******	******	******	******	0.3388
OCT 8,82	OCT 7,82	0.49	0.61	0.075	0.210	0.200	1.260	0.3090
OCT 9,82	OCT 8,82	0.67	0.09	0.075	0.070	0.030	1.010	0.0151
OCT 11,82	OCT 10,82	0.50	0.56	0.060	0.750	0.300	0.306	0.0631
OCT 12,82	OCT 11,82	******	******	******	******	******	******	0.3020
OCT 13,82	OCT 12,82	0.12	0.16	0.005	0.170	0.035	0.480	0.0741
OCT 14,82	OCT 13,82	0.31	0.13	0.050	0.065	0.020	0.490	0.0398
OCT 15,82	OCT 14,82	0.05	0.03	0.010	0.050	0.055	0.064	0.0072
OCT 17,82	OCT 16,82	******	0.44	******	******	******	******	U 0.0002
OCT 21,82	OCT 20,82	0.26	0.21	0.060	0.080	0.140	0.212	0.0562
NOV 1,82	OCT 31,82	******	U 0.36	******	******	******	******	0.0933
NOV 2,82	NOV 1,82	0.13	0.10	0.015	0.090	0.050	0.272	0.0794
NOV 3,82	NOV 2,82	0.10	0.11	0.015	0.045	0.045	0.306	0.0708
NOV 4,82	NOV 3,82	0.13	0.03	0.015	0.020	<W 0.005	0.032	0.0115
NOV 5,82	NOV 4,82	0.14	0.02	0.020	U 0.140	U 0.160	0.126	0.0302
NOV 6,82	NOV 5,82	******	0.19	******	******	******	0.410	0.0081
NOV 11,82	NOV 10,82	0.63	0.70	0.115	0.370	0.375	0.930	0.1288
NOV 12,82	NOV 11,82	0.14	0.21	0.020	0.050	0.110	0.560	0.0692
NOV 15,82	NOV 14,82	******	******	******	******	******	******	******
NOV 21,82	NOV 20,82	0.04	0.12	<W 0.005	0.010	0.030	0.224	0.0661
NOV 22,82	NOV 21,82	******	U 0.59	******	******	******	******	U 0.0006
NOV 23,82	NOV 22,82	0.03	0.05	<W 0.005	0.010	0.015	0.070	0.0191
NOV 29,82	NOV 28,82	0.07	0.14	<W 0.005	0.080	0.060	0.138	0.0479

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07 PAGE : 7

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
NOV 30,82	NOV 29,82	730	730	1630	1830	1	13.9	2	28196	2	1	90		
DEC 1,82	NOV 30,82	730	730	730	930	1	1.3	2	28197	2	1	96		
DEC 5,82	DEC 2,82	730	730	1700	1000	1	18.1	2	28198	2	1	104		Z
DEC 6,82	DEC 5,82	730	730	1800	2100	1	33.9	2	28199	2	1	108		
DEC 8,82	DEC 7,82	730	730	900	1000	2	0.5	2	28200	2	1	202		N
DEC 9,82	DEC 8,82	730	730	1600	1800	*	3.3	2	28201	2	1	****	EK	
DEC 11,82	DEC 10,82	730	730	1600	1900	2	5.9	2	28202	2	1	****	EK	
DEC 16,82	DEC 15,82	730	730	1730	1900	1	14.9	2	28203	2	1	36		N
DEC 17,82	DEC 16,82	730	730	730	900	2	2.5	2	28204	2	1	21	C	N
DEC 19,82	DEC 18,82	730	730	900	100	2	0.7	2	28205	2	1	****	EK	
DEC 21,82	DEC 20,82	730	730	1000	1100	2	1.7	2	28206	2	1	****	EK	
DEC 23,82	DEC 22,82	730	730	900	1200	2	3.1	2	28207	2	1	****	EK	
DEC 24,82	DEC 23,82	730	800	1700	2100	1	10.7	2	28208	2	1	98		
DEC 25,82	DEC 24,82	800	900	1700	2000	1	20.1	2	28209	2	1	94		
DEC 26,82	DEC 25,82	900	800	2100	2300	1	3.3	2	28210	2	1	108		
DEC 28,82	DEC 27,82	800	800	600	800	1	****	2	28211	2	1	****		
DEC 29,82	DEC 28,82	800	830	1430	1700	1	12.3	2	28212	2	1	95		
DEC 30,82	DEC 29,82	830	800	1300	1400	2	1.5	2	28213	2	1	20	C	N
JAN 1,83	DEC 31,82	830	830	1200	1400	2	2.9	2	28214	2	1	10	C	N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07 PAGE : 8

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM		PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
NOV 30,82	NOV 29,82		805.0	16.6		4.36		4.48		0.0570		1.45		0.19
DEC 1,82	NOV 30,82		80.0	******		******		3.94		0.1368		4.35		1.35
DEC 5,82	DEC 2,82		1215.0	22.9		4.20		4.25		0.0780		1.95		0.24
DEC 6,82	DEC 5,82		2355.0	13.3		4.44		4.43		0.0566		1.10		0.13
DEC 8,82	DEC 7,82		65.0	******		******		4.35		0.0628		1.65		0.52
DEC 9,82	DEC 8,82		******	******		******		******		******		******		******
DEC 11,82	DEC 10,82		******	******		******	U	3.57	U	0.3000	U	9.60	U	2.00
DEC 16,82	DEC 15,82	U	350.0	******	U	4.76	U	4.70	U	0.0466		1.05		0.20
DEC 17,82	DEC 16,82	U	35.0	******		******	U	6.80	U	0.0284		******		******
DEC 19,82	DEC 18,82		******	******		******		******		******		******		******
DEC 21,82	DEC 20,82		******	******		******		******		******		******		******
DEC 23,82	DEC 22,82		******	******		******		******		******		******		******
DEC 24,82	DEC 23,82		673.0	43.3		4.04		3.99		0.1250		4.15		0.62
DEC 25,82	DEC 24,82		1222.0	28.4		4.20		4.28		0.0884		2.30		0.40
DEC 26,82	DEC 25,82		229.0	******	U	4.80		4.74		0.0498		1.65		0.21
DEC 28,82	DEC 27,82		366.0	28.0		4.22		4.26		0.0834		2.70		0.32
DEC 29,82	DEC 28,82		750.0	18.8		4.48		4.43		0.0614		2.15		0.28
DEC 30,82	DEC 29,82	U	20.0	******		******	U	6.82	U	0.0784		******		******
JAN 1,83	DEC 31,82	U	20.0	******		******	U	6.25	U	0.0214		******		******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : NITHGROVE/DAILY/AEROCHEM #07 PAGE : 9

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
NOV 30,82	NOV 29,82	0.08	0.12	<W 0.005	0.070	0.065	0.092	0.0331
DEC 1,82	NOV 30,82	******	0.58	******	******	******	0.770	0.1148
DEC 5,82	DEC 2,82	0.09	0.18	0.005	0.020	0.100	0.110	0.0562
DEC 6,82	DEC 5,82	0.03	0.08	0.005	0.010	0.040	0.076	0.0372
DEC 8,82	DEC 7,82	******	0.13	******	0.070	0.065	******	0.0447
DEC 9,82	DEC 8,82	******	******	******	******	******	******	******
DEC 11,82	DEC 10,82	******	U 0.91	******	******	******	******	U 0.2692
DEC 16,82	DEC 15,82	U 0.17	0.16	U 0.030	U 0.045	U 0.220	0.032	U 0.0200
DEC 17,82	DEC 16,82	******	******	******	******	******	******	U 0.0002
DEC 19,82	DEC 18,82	******	******	******	******	******	******	******
DEC 21,82	DEC 20,82	******	******	******	******	******	******	******
DEC 23,82	DEC 22,82	******	******	******	******	******	******	******
DEC 24,82	DEC 23,82	0.22	0.18	0.040	0.070	0.090	0.410	0.1023
DEC 25,82	DEC 24,82	0.05	0.22	0.020	0.050	0.100	0.246	0.0525
DEC 26,82	DEC 25,82	0.19	0.14	0.030	0.095	0.085	0.344	0.0182
DEC 28,82	DEC 27,82	0.07	U 0.46	U 0.045	U 0.080	U 0.275	0.140	0.0550
DEC 29,82	DEC 28,82	0.16	0.13	0.035	0.035	0.060	0.350	0.0372
DEC 30,82	DEC 29,82	******	******	******	******	******	******	U 0.0002
JAN 1,83	DEC 31,82	******	******	******	******	******	******	U 0.0006

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/SES #05 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 4.82	JAN 3.82	830	830	500	800	4	5.1	2	28684	2	1	54	C	
JAN 5.82	JAN 4.82	830	830	900	1100	4	7.1	2	28685	2	1	76	C	
JAN 7.82	JAN 6.82	830	830	1000	1400	2	2.1	2	28686	2	1	31		N
JAN 9.82	JAN 8.82	830	830	1400	1800	2	4.1	2	28687	2	1	42		N
JAN 13.82	JAN 12.82	830	830	500	830	2	2.1	2	28688	2	1	47	C	N
JAN 14.82	JAN 13.82	830	830	830	1600	2	3.1	2	28689	2	1	42		N
JAN 16.82	JAN 15.82	830	830	300	830	2	3.1	2	28690	2	1	65	C	
JAN 17.82	JAN 16.82	830	830	830	1100	2	3.1	2	28691	2	1	33	C	N
JAN 18.82	JAN 17.82	830	830	1600	2200	2	1.1	2	28692	2	1	41	C	N
JAN 23.82	JAN 22.82	830	830	400	830	3	10.1	2	28693	2	1	68	C	
JAN 24.82	JAN 23.82	830	830	830	1000	3	4.1	2	28694	2	1	49	C	N
JAN 29.82	JAN 28.82	830	830	1600	1700	2	1.1	2	28695	2	1	19	C	N
JAN 30.82	JAN 29.82	830	830	600	830	2	5.1	2	28696	2	1	66	C	
JAN 31.82	JAN 30.82	830	830	830	1230	2	4.1	2	28697	2	1	66		
FEB 1.82	JAN 31.82	830	830	1400	2400	2	17.1	2	28698	2	1	54		
FEB 4.82	FEB 3.82	830	830	1200	200	2	15.1	2	28699	2	1	62		
FEB 6.82	FEB 5.82	830	830	1500	2300	2	5.1	2	28700	2	1	89		
FEB 10.82	FEB 9.82	830	830	200	500	2	2.1	2	28701	2	1	65	C	
FEB 19.82	FEB 18.82	830	830	200	800	3	6.7	2	28702	2	1	76		
FEB 21.82	FEB 20.82	830	830	1600	2400	3	5.9	2	28703	2	1	83		
MAR 2.82	MAR 1.82	830	830	1600	1900	2	1.5	2	28704	2	1	42		NH
MAR 5.82	MAR 4.82	830	830	1400	2400	2	16.1	2	28705	2	1	64		
MAR 7.82	MAR 6.82	830	830	2000	2400	2	2.7	2	28706	2	1	91		
MAR 9.82	MAR 8.82	830	830	300	830	2	3.5	2	28707	2	1	35		N
MAR 11.82	MAR 10.82	830	830	1400	1600	2	2.7	2	28708	2	1	63		
MAR 12.82	MAR 11.82	830	830	1000	1400	1	1.5	2	28709	2	1	101		
MAR 13.82	MAR 12.82	830	830	600	800	1	9.9	2	28710	2	1	98		
MAR 17.82	MAR 16.82	830	830	1700	2100	3	15.7	2	28711	2	1	68		
MAR 19.82	MAR 18.82	830	830	1600	2100	3	1.9	2	28712	2	1	94		
MAR 22.82	MAR 21.82	830	830	1400	1900	3	10.1	2	28713	2	1	94		
MAR 26.82	MAR 25.82	830	830	1800	830	2	10.1	2	28714	2	1	67		
MAR 27.82	MAR 26.82	830	830	830	1000	2	0.4	2	28715	2	1	38	C	N
MAR 31.82	MAR 30.82	830	830	300	600	1	2.6	2	28716	2	1	126		N
APR 3.82	APR 2.82	830	830	400	830	1	7.5	2	28717	2	1	101		
APR 4.82	APR 3.82	830	830	1600	1800	4	8.1	2	28718	2	1	****	EG	
APR 11.82	APR 10.82	830	830	600	830	2	2.3	2	28719	2	1	91	C	
APR 12.82	APR 11.82	830	830	830	1230	2	3.1	2	28720	2	1	89		
APR 13.82	APR 12.82	830	830	400	600	1	6.1	2	28721	2	1	105	C	
APR 14.82	APR 13.82	830	830	900	1200	1	2.6	2	28722	2	1	124		N
APR 17.82	APR 16.82	830	830	2130	2300	1	3.7	2	28723	2	1	112	C	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/SES #05 PAGE : 7

REMOVAL DATE	EXPOSURE DATE		VOLUME ML		CONDUCT. UMHO/CM		PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
JAN 4,82	JAN 3,82		455.0		36.5		4.18		4.16		0.1178		3.15		0.73
JAN 5,82	JAN 4,82		890.0		16.0		4.54		4.53		0.0692		1.50		0.27
JAN 7,82	JAN 6,82	U	110.0		******		******		4.04		******		4.60		1.17
JAN 9,82	JAN 8,82	U	285.0		13.3		******		4.64		0.0648		0.70		0.49
JAN 13,82	JAN 12,82	U	165.0		******		******		4.16		******		0.50		0.73
JAN 14,82	JAN 13,82	U	215.0		16.5		******		4.46		******		0.50		0.38
JAN 16,82	JAN 15,82		335.0		41.8		******		4.05		0.1252		1.55		1.17
JAN 17,82	JAN 16,82	U	170.0		24.0		******		4.23		******		0.75		0.71
JAN 18,82	JAN 17,82	U	75.0		******		******	U	4.81		******	U	1.40		0.54
JAN 23,82	JAN 22,82		1135.0		13.7		4.59		4.58		0.0574		0.90		0.25
JAN 24,82	JAN 23,82	U	330.0		31.5		******		4.21		0.1056		3.10		0.52
JAN 29,82	JAN 28,82	U	35.0		******		******	U	4.77		******		5.65	U	2.29
JAN 30,82	JAN 29,82		555.0		23.5		4.52		4.40		0.0800		0.90		0.84
JAN 31,82	JAN 30,82		450.0		14.9		4.53		4.49		0.0666		0.65		0.36
FEB 1,82	JAN 31,82		1540.0		11.7		4.59		4.56		0.0578		0.60		0.22
FEB 4,82	FEB 3,82		1535.0		15.5		******		4.48		0.0712		0.75		0.39
FEB 6,82	FEB 5,82		750.0		18.4		4.42		4.37		0.0744		0.45		0.54
FEB 10,82	FEB 9,82		225.0		26.9		******		4.30		******		0.85		1.06
FEB 19,82	FEB 18,82		845.0		31.0		4.28		4.24		0.1072		2.25		0.79
FEB 21,82	FEB 20,82		805.0	U	44.8		4.04		4.02	U	0.1384	U	2.80	U	0.84
MAR 2,82	MAR 1,82	U	105.0		******		******	U	5.06		******	U	7.05		1.69
MAR 5,82	MAR 4,82		1700.0		31.0		4.25		4.16		0.1030		2.00		0.66
MAR 7,82	MAR 6,82		405.0		30.6		4.21		4.15		0.1094		0.70		0.89
MAR 9,82	MAR 8,82	U	205.0		41.2		******		4.04		******		0.75		1.33
MAR 11,82	MAR 10,82		280.0		167.0		******		3.50		0.4304		11.30		3.46
MAR 12,82	MAR 11,82		250.0	U	172.0		******	U	3.49	U	0.4318	U	14.00	U	2.77
MAR 13,82	MAR 12,82		1595.0		62.0		3.86		3.94		0.1622		5.45		0.77
MAR 17,82	MAR 16,82		1765.0		13.8		4.53		4.69		0.0452		1.05		0.34
MAR 19,82	MAR 18,82		295.0		155.0		******		3.48		0.4222		10.20		2.63
MAR 22,82	MAR 21,82		1560.0		41.7		4.08		4.11		0.1142		3.50		0.76
MAR 26,82	MAR 25,82		1120.0		13.5		4.67		4.66		0.0464		1.05		0.37
MAR 27,82	MAR 26,82	U	25.0		******		******	U	5.90		******		******		******
MAR 31,82	MAR 30,82		540.0		32.8	U	4.36	U	4.64		0.0586		4.70		1.12
APR 3,82	APR 2,82		1250.0	U	8.0	U	4.94	U	5.22		0.0284		1.35		0.11
APR 4,82	APR 3,82		******		******		******		******		******		******		******
APR 11,82	APR 10,82		345.0		44.0	U	4.12	U	4.21	U	0.0902		4.45		1.18
APR 12,82	APR 11,82		455.0		53.5		3.87		3.96		0.1526		5.35		1.03
APR 13,82	APR 12,82		1055.0		61.0		3.99		4.10		0.1208	U	6.90	U	1.57
APR 14,82	APR 13,82		530.0		43.2		4.05		4.18		0.0976		4.80		0.62
APR 17,82	APR 16,82		685.0		78.5		3.81		3.93		0.1748		7.90		1.80

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/SES #05 PAGE : 3

REMOVAL DATE	EXPOSURE DATE		CALCIUM MG/L		CHLORIDE MG/L		MAGNESIM MG/L		POTASSIM MG/L		SODIUM MG/L		AMMONIUM AS N MG/L		FREE H+ LAB MG/L
JAN 4,82	JAN 3,82	U	0.65	U	0.61		0.020		0.110	U	0.410		0.410		0.0692
JAN 5,82	JAN 4,82		0.41		0.08		0.020		0.030		0.050		0.082		0.0295
JAN 7,82	JAN 6,82		1.06		0.38		0.080		0.550		0.180		0.680		0.0912
JAN 9,82	JAN 8,82		0.54		0.20		0.035		0.020		0.090		0.038		0.0229
JAN 13,82	JAN 12,82		0.31	U	1.10		0.020		0.030		0.140		0.014		0.0692
JAN 14,82	JAN 13,82		0.05		0.28	<T	0.005		0.035		0.040		0.016		0.0347
JAN 16,82	JAN 15,82		0.67		0.60		0.045		0.115		0.205		0.100		0.0891
JAN 17,82	JAN 16,82		0.42		0.29		0.025		0.030		0.080		0.020		0.0589
JAN 18,82	JAN 17,82		******	U	0.70		******		******		******		0.050	U	0.0155
JAN 23,82	JAN 22,82		0.19		0.13	<T	0.005		0.030		0.080		0.024		0.0263
JAN 24,82	JAN 23,82		0.53		0.22		0.050		0.060		0.125		0.246		0.0617
JAN 29,82	JAN 28,82		******	U	1.70		******		******		******		******	U	0.0170
JAN 30,82	JAN 29,82		0.71		0.40		0.050		0.045		0.300		0.060		0.0398
JAN 31,82	JAN 30,82		0.11		0.11	<T	0.005		0.005		0.030		0.048		0.0324
FEB 1,82	JAN 31,82		0.04		0.04	<T	0.005		0.005		0.010		0.008		0.0275
FEB 4,82	FEB 3,82		0.30		0.22		0.005		0.015		0.105		0.024		0.0331
FEB 6,82	FEB 5,82		0.04		0.14	<T	0.005	<T	0.005		0.075		0.016		0.0427
FEB 10,82	FEB 9,82	U	1.06	U	0.50		0.065		0.045		0.250		0.048		0.0501
FEB 19,82	FEB 18,82		0.62		0.25		0.040		0.040		0.205		0.158		0.0575
FEB 21,82	FEB 20,82	U	0.15		0.22		0.005		0.015		0.030		0.326		0.0955
MAR 2,82	MAR 1,82	U	4.49	U	1.44	U	0.270		0.095	U	0.655	U	1.640	U	0.0087
MAR 5,82	MAR 4,82		0.30		0.11		0.005		0.015		0.065		0.230		0.0692
MAR 7,82	MAR 6,82		0.24		0.35		0.010		0.010		0.175		0.040		0.0708
MAR 9,82	MAR 8,82		0.46	U	0.56		0.065		0.010		0.305		0.028		0.0912
MAR 11,82	MAR 10,82		1.07		1.12		0.110		0.095		0.495		1.510		0.3162
MAR 12,82	MAR 11,82	U	0.84	U	0.82	U	0.060	U	0.080	U	0.265	U	1.730	U	0.3236
MAR 13,82	MAR 12,82		0.36		0.45		0.045		0.045		0.255		0.520		0.1148
MAR 17,82	MAR 16,82		0.45		0.04		0.015		0.005		0.025		0.134		0.0204
MAR 19,82	MAR 18,82		0.58		0.52		0.030		0.020		0.115		0.600		0.3311
MAR 22,82	MAR 21,82		0.62		0.14		0.045		0.025		0.090		0.350		0.0776
MAR 26,82	MAR 25,82		0.37		0.08		0.040		0.015		0.060		0.142		0.0219
MAR 27,82	MAR 26,82		******		******		******		******		******		******	U	0.0013
MAR 31,82	MAR 30,82	U	1.76	U	0.62	U	0.190		0.070		0.385	U	0.710	U	0.0229
APR 3,82	APR 2,82		0.45		0.02		0.015		0.020		0.035		0.106	U	0.0040
APR 4,82	APR 3,82		******		******		******		******		******		******		******
APR 11,82	APR 10,82	U	1.20		0.23		0.090		0.025		0.135		0.640	U	0.0617
APR 12,82	APR 11,82		0.06		0.06		0.005	<T	0.005		0.015		0.840		0.1096
APR 13,82	APR 12,82	U	1.50		0.38	U	0.175	U	0.140		0.125	U	1.220		0.0794
APR 14,82	APR 13,82		0.35		0.17		0.030		0.025		0.035		0.740		0.0661
APR 17,82	APR 16,82	U	1.96	U	0.50	U	0.190		0.115		0.200		0.830		0.1175

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/SES #05 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
APR 18.82	APR 17.82	830	830	900	1000	4	4.1	2	28724	2	1	107	C	
APR 20.82	APR 19.82	830	830	600	830	1	7.9	2	28725	2	1	96	C	
APR 21.82	APR 20.82	830	830	830	1230	4	7.3	2	28726	2	1	104		
APR 27.82	APR 26.82	930	930	2200	2400	1	2.0	1	28727	2	1	94	C	J

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/SES #05 PAGE : 5

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM		PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L	
APR 18,82	APR 17,82	725.0	52.2		4.00		4.14		0.1168		6.50		0.71	
APR 20,82	APR 19,82	1255.0	41.0		4.15		4.28		0.0896		4.30		1.11	
APR 21,82	APR 20,82	1245.0	35.3		4.11		4.22		0.0972		3.65		0.36	
APR 27,82	APR 26,82	310.0	68.2	U	6.64	U	7.24	U	0.0348	U	8.75	U	1.84	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/SES #05 PAGE : 6

REMOVAL DATE	EXPOSURE DATE		CALCIUM MG/L		CHLORIDE MG/L		MAGNESIM MG/L		POTASSIM MG/L		SODIUM MG/L		AMMONIUM AS N MG/L		FREE H+ LAB MG/L
APR 18,82	APR 17,82		0.65		0.36		0.155		0.095		0.215		0.810		0.0724
APR 20,82	APR 19,82	U	1.08		0.22		0.130		0.040		0.070		0.640		0.0525
APR 21,82	APR 20,82		0.20		0.10		0.020		0.020		0.035		0.310		0.0503
APR 27,82	APR 26,82	U	6.09	U	0.66	U	1.050	U	0.360	U	0.275	U	1.590	U	0.0001

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAY 6,82	MAY 5,82	830	830	500	600	1	2.2	1	28728	2	1	92	C	
MAY 8,82	MAY 7,82	830	830	500	830	1	7.0	1	28729	2	1	95	C	JHCM
MAY 9,82	MAY 8,82	830	830	830	1300	1	2.0	1	28730	2	1	54	C	
MAY 20,82	MAY 19,82	830	830	1600	1750	1	8.0	1	28731	2	1	98	C	
MAY 23,82	MAY 22,82	830	830	1900	2100	1	2.4	1	28732	2	1	97	C	
MAY 24,82	MAY 23,82	830	830	1100	1400	1	10.0	1	28733	2	1	93		
MAY 28,82	MAY 27,82	830	830	400	500	1	4.0	1	28734	2	1	81		
MAY 29,82	MAY 28,82	830	830	915	1045	1	12.6	1	28735	2	1	101		
MAY 31,82	MAY 30,82	830	830	1000	1200	1	6.0	1	28736	2	1	87	C	
JUN 2,82	JUN 1,82	830	830	845	1000	1	8.0	1	28737	2	1	92		T
JUN 6,82	JUN 5,82	830	830	1900	2200	1	8.4	1	28738	2	1	84	C	
JUN 7,82	JUN 6,82	830	830	1900	2000	1	1.8	1	28739	2	1	43		N
JUN 11,82	JUN 10,82	830	830	1400	1900	1	14.4	1	28740	2	1	102		
JUN 14,82	JUN 13,82	830	830	1300	1500	1	1.3	1	28741	2	1	90		
JUN 15,82	JUN 14,82	830	830	700	730	1	1.4	1	28742	2	1	94		
JUN 16,82	JUN 15,82	830	830	1400	2200	1	35.5	1	28743	2	1	101		
JUN 19,82	JUN 18,82	830	830	2200	2400	1	8.2	1	28744	2	1	101		
JUN 20,82	JUN 19,82	830	830	930	1500	1	6.7	1	28745	2	1	105		
JUN 21,82	JUN 20,82	830	830	2230	2400	1	10.0	1	28746	2	1	98		
JUN 22,82	JUN 21,82	830	830	1445	1530	1	1.1	1	28747	2	1	77		
JUN 23,82	JUN 22,82	830	830	1000	1200	1	4.3	1	28748	2	1	99		
JUN 26,82	JUN 25,82	830	830	900	1100	1	2.1	1	28749	2	1	81	B	
JUL 8,82	JUL 7,82	830	830	1400	1430	1	0.3	1	28750	2	1	103	C	
JUL 12,82	JUL 11,82	830	830	2200	2230	1	0.2	1	28751	2	1	116		
JUL 18,82	JUL 17,82	830	830	1400	1600	1	6.0	1	28752	2	1	****	EIK	
JUL 19,82	JUL 18,82	830	830	1800	1930	1	6.2	1	28753	2	1	103		
JUL 28,82	JUL 27,82	830	830	2000	2300	1	16.8	1	28754	2	1	101		
JUL 29,82	JUL 28,82	830	830	1515	1545	1	2.3	1	28755	2	1	88		HCM
JUL 31,82	JUL 30,82	830	830	2200	2400	1	10.0	1	28756	2	1	85	A	
AUG 3,82	AUG 2,82	830	830	1000	1300	1	6.4	1	28757	2	1	97	A	JHC
AUG 9,82	AUG 8,82	830	830	1200	1800	1	8.3	1	28758	2	1	96		
AUG 14,82	AUG 13,82	830	830	1445	1500	1	1.0	1	28759	2	1	70		
AUG 20,82	AUG 19,82	830	830	1815	1845	1	20.5	1	28760	2	1	103		
AUG 21,82	AUG 20,82	830	830	730	800	1	1.0	1	28761	2	1	31		N
AUG 23,82	AUG 22,82	830	830	1500	1900	1	22.0	1	28762	2	1	102		
AUG 25,82	AUG 24,82	830	830	400	830	1	30.0	1	28763	2	1	104	A	
AUG 26,82	AUG 25,82	830	830	830	1030	1	2.1	1	28764	2	1	85		HM
AUG 27,82	AUG 26,82	830	830	1030	1045	1	0.4	1	28765	2	1	77		
AUG 28,82	AUG 27,82	830	830	1200	1230	1	2.3	1	28766	2	1	105		
AUG 29,82	AUG 28,82	830	830	1300	1330	1	2.7	1	28767	2	1	112		JHCM

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L	
MAY 6,82	MAY 5,82	130.0	87.0	******	U	7.00	U	0.0532	U	19.10	U	2.70	
MAY 8,82	MAY 7,82	430.0	8.6	4.75	U	5.15	U	0.0410		0.85		0.23	
MAY 9,82	MAY 8,82	70.0	******	******		5.02		0.0474		1.10		0.19	
MAY 20,82	MAY 19,82	505.0	30.0	4.24		4.43		0.0716		3.60		0.77	
MAY 23,82	MAY 22,82	150.0	24.1	******		4.54		0.0618		3.15		0.35	
MAY 24,82	MAY 23,82	600.0	33.9	4.05		4.22		0.0960		3.30		0.38	
MAY 28,82	MAY 27,82	210.0	60.1	3.84		3.92		0.1594		5.55		0.77	
MAY 29,82	MAY 28,82	820.0	29.8	4.15		4.28		0.0852		3.20		0.2	
MAY 31,82	MAY 30,82	335.0	81.2	3.73		3.71		0.2006		7.40		1.0	
JUN 2,82	JUN 1,82	475.0	58.8	3.86		3.82		0.1490		4.85		0.77	
JUN 6,82	JUN 5,82	455.0	11.6	4.44		4.59		0.0356		0.85		0.20	
JUN 7,82	JUN 6,82	U 50.0	******	******	U	5.86	U	0.0200		0.75		0.16	
JUN 11,82	JUN 10,82	950.0	90.1	3.70		3.63		0.2360		9.40		0.75	
JUN 14,82	JUN 13,82	75.0	******	******		4.09		0.1134		7.60		1.59	
JUN 15,82	JUN 14,82	85.0	******	******		4.27		0.1002		8.90		2.02	
JUN 16,82	JUN 15,82	2315.0	49.6	3.94		3.97		0.1260		4.15		0.50	
JUN 19,82	JUN 18,82	535.0	30.0	4.21		4.28		0.0730		2.80		0.61	
JUN 20,82	JUN 19,82	455.0	43.8	3.98		4.00		0.1198		3.50		0.58	
JUN 21,82	JUN 20,82	630.0	22.4	4.33		4.40		0.0656		2.25		0.41	
JUN 22,82	JUN 21,82	55.0	******	******		4.76		0.0382		1.15		0.20	
JUN 23,82	JUN 22,82	275.0	10.5	4.65		4.88		0.0360		0.90		0.23	
JUN 26,82	JUN 25,82	110.0	******	******		4.20		0.0998		5.00		0.73	
JUL 8,82	JUL 7,82	20.0	******	******	U	6.73	U	0.0218		******		******	
JUL 12,82	JUL 11,82	15.0	******	******	U	3.66		0.2460		******		******	
JUL 18,82	JUL 17,82	******	******	******		******		******		******		******	
JUL 19,82	JUL 18,82	410.0	30.3	4.08		4.18		0.0792		2.90		0.48	
JUL 28,82	JUL 27,82	1090.0	11.0	4.60		4.61		0.0372		0.85		0.17	
JUL 29,82	JUL 28,82	130.0	4.2	******	U	5.58		0.0194		0.15		0.05	
JUL 31,82	JUL 30,82	550.0	51.0	3.90		3.93		0.1332		4.50		0.81	
AUG 3,82	AUG 2,82	400.0	7.1	4.60		5.37		0.0232		0.55		0.15	
AUG 9,82	AUG 8,82	515.0	54.0	3.90		3.90		0.1384		5.65		0.52	
AUG 14,82	AUG 13,82	45.0	******	******	U	5.44	U	0.0204	U	0.30	U	0.09	
AUG 20,82	AUG 19,82	1360.0	20.0	4.45		4.69		0.0564		3.85		0.43	
AUG 21,82	AUG 20,82	U 20.0	******	******		4.28		0.0722		******		******	
AUG 23,82	AUG 22,82	1450.0	29.5	4.12		4.18		0.0908		2.70		0.39	
AUG 25,82	AUG 24,82	2005.0	15.5	4.37		4.48		0.0580		1.40		0.16	
AUG 26,82	AUG 25,82	115.0	******	******		4.96		0.0374		0.20		0.05	
AUG 27,82	AUG 26,82	20.0	******	******	U	6.01		0.0364		******		******	
AUG 28,82	AUG 27,82	155.0	******	******		4.37		0.0658		2.20		0.30	
AUG 29,82	AUG 28,82	195.0	4.5	5.12		5.54		0.0294		0.20		0.04	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L		CHLORIDE MG/L		MAGNESIM MG/L		POTASSIM MG/L		SODIUM MG/L		AMMONIUM AS N MG/L		FREE H+ LAB MG/L
MAY 6,82	MAY 5,82	******		0.68		******		******		******		******	U	0.0001
MAY 8,82	MAY 7,82	0.24		0.04		0.035		0.025		0.020		0.076	U	0.0071
MAY 9,82	MAY 8,82	******		0.42		******		******		******		******		0.0095
MAY 20,82	MAY 19,82	0.68		0.11		0.105		0.035		0.025		0.710		0.0372
MAY 23,82	MAY 22,82	0.71		0.04		0.055		0.035		0.035		0.180		0.0288
MAY 24,82	MAY 23,82	0.11		0.01		0.015	<T	0.015		0.025		0.296		0.0603
MAY 28,82	MAY 27,82	0.17		0.09		0.010		0.020		0.020		0.450		0.1202
MAY 29,82	MAY 28,82	0.06	<W	0.01	<W	0.005		0.050	<W	0.005		0.380		0.0525
MAY 31,82	MAY 30,82	0.42		0.19		0.040		0.085		0.065		0.560		0.1950
JUN 2,82	JUN 1,82	0.19		0.16		0.025		0.045		0.040		0.314		0.1514
JUN 6,82	JUN 5,82	0.16		0.04		0.015		0.020		0.015		0.072		0.0257
JUN 7,82	JUN 6,82	******		0.13		******		******		******		******	U	0.0014
JUN 11,82	JUN 10,82	0.16		0.14		0.015		0.045		0.025		0.580		0.2344
JUN 14,82	JUN 13,82	******		0.31		******		******		******		******		0.0813
JUN 15,82	JUN 14,82	******		0.56		******		******		******		******		0.0537
JUN 16,82	JUN 15,82	0.11		0.19		0.015		0.055		0.030		0.282		0.1072
JUN 19,82	JUN 18,82	0.33		0.09		0.020		0.025		0.015		0.600		0.0525
JUN 20,82	JUN 19,82	0.11		0.09		0.015	<T	0.010	<T	0.010		0.244		0.1000
JUN 21,82	JUN 20,82	0.16		0.02		0.020		0.030		0.020		0.460		0.0398
JUN 22,82	JUN 21,82	******		0.08		******		******		******		******		0.0174
JUN 23,82	JUN 22,82	0.27		0.02		0.020		0.025	<T	0.005		0.142		0.0132
JUN 26,82	JUN 25,82	******		0.12		******		******		******		0.940		0.0631
JUL 8,82	JUL 7,82	******		******		******		******		******		******	U	0.0002
JUL 12,82	JUL 11,82	******		******		******		******		******		******	U	0.2188
JUL 18,82	JUL 17,82	******		******		******		******		******		******		******
JUL 19,82	JUL 18,82	0.20		0.11		0.025		0.030		0.050		0.380		0.0661
JUL 28,82	JUL 27,82	0.11	<W	0.01		0.005	<T	0.010	<T	0.010		0.134		0.0245
JUL 29,82	JUL 28,82	0.16		0.05		0.005		0.025		0.045		0.064	U	0.0026
JUL 31,82	JUL 30,82	0.45		0.22		0.090		0.055		0.045		0.274		0.1175
AUG 3,82	AUG 2,82	0.16	<T	0.02		0.010		0.040	<T	0.010		0.206		0.0043
AUG 9,82	AUG 8,82	0.13		0.05		0.005		0.030		0.020		0.530		0.1259
AUG 14,82	AUG 13,82	******		0.04		******		******		******		******	U	0.0036
AUG 20,82	AUG 19,82	0.61		0.05		0.105		0.055	<W	0.005		0.810		0.0204
AUG 21,82	AUG 20,82	******		******		******		******		******		******		0.0525
AUG 23,82	AUG 22,82	0.09		0.05		0.025	<T	0.015	<W	0.005		0.238		0.0661
AUG 25,82	AUG 24,82	0.04		0.03		0.015	<T	0.005	<T	0.005		0.182		0.0331
AUG 26,82	AUG 25,82	0.03		0.08		0.020		0.025		0.020		0.080		0.0110
AUG 27,82	AUG 26,82	******		******		******		******		******		******	U	0.0010
AUG 28,82	AUG 27,82	******		0.08		******		******		******		0.262		0.0427
AUG 29,82	AUG 28,82	0.09		0.06		0.020	<T	0.010	<T	0.010		0.074		0.0079

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
SEP 2,82	SEP 1,82	830	830	1915	1945	1	2.7	1	28768	2	1	109		
SEP 3,82	SEP 2,82	830	830	1800	1900	1	4.3	1	28769	2	1	92		
SEP 4,82	SEP 3,82	830	830	1200	1300	1	1.0	1	28770	2	1	70		
SEP 6,82	SEP 5,82	830	830	700	830	1	4.5	1	28771	2	1	97		HM
SEP 7,82	SEP 6,82	830	830	830	1000	1	2.3	1	28772	2	1	88		
SEP 13,82	SEP 12,82	830	830	1800	1820	1	2.9	1	28773	2	1	75		
SEP 14,82	SEP 13,82	830	830	800	830	1	4.8	1	28774	2	1	113		M
SEP 15,82	SEP 14,82	830	830	1015	1115	1	4.5	1	28775	2	1	97		
SEP 16,82	SEP 15,82	830	830	400	500	1	1.1	1	28776	2	1	56		
SEP 18,82	SEP 17,82	830	830	2330	430	1	22.5	1	28777	2	1	108		HM
SEP 21,82	SEP 20,82	830	830	1700	1750	1	2.3	1	28778	2	1	91		
SEP 22,82	SEP 21,82	830	830	500	700	1	1.0	1	28779	2	1	70		
SEP 23,82	SEP 22,82	830	830	700	830	1	2.6	1	28780	2	1	108		
SEP 24,82	SEP 23,82	830	830	830	930	1	0.3	1	28781	2	1	67		
SEP 25,82	SEP 24,82	830	830	****	****	1	8.8	1	28782	2	1	107		
SEP 27,82	SEP 26,82	830	830	200	830	1	4.2	1	28783	2	1	96		HM
SEP 28,82	SEP 27,82	830	830	1045	1245	1	4.5	1	28784	2	1	91		HM
OCT 2,82	OCT 1,82	830	830	1000	1015	1	0.4	1	28785	2	1	202		N
OCT 8,82	OCT 7,82	830	830	1230	1330	1	8.0	1	28786	2	1	95		
OCT 9,82	OCT 8,82	830	830	1645	1800	1	2.2	1	28787	2	1	78		H
OCT 11,82	OCT 10,82	830	830	600	800	1	6.7	1	28788	2	1	105		
OCT 12,82	OCT 11,82	830	830	2100	2300	1	2.5	1	28789	2	1	93		
OCT 14,82	OCT 13,82	830	830	1700	1750	1	0.6	1	28790	2	1	104		
OCT 15,82	OCT 14,82	830	830	1400	2000	1	10.6	1	28791	2	1	11		N
OCT 16,82	OCT 15,82	830	830	1300	1330	3	0.8	1	28792	2	1	156		N
OCT 17,82	OCT 16,82	830	830	830	1100	3	0.7	1	28793	2	1	55		
OCT 21,82	OCT 20,82	830	830	1330	1600	1	8.3	1	28794	2	1	105		
OCT 22,82	OCT 21,82	830	830	900	930	3	0.4	1	28795	2	1	97		
OCT 30,82	OCT 29,82	830	830	1700	1720	1	0.7	1	28796	2	1	44		N
NOV 1,82	OCT 31,82	830	830	1900	1930	1	0.8	1	28797	2	1	126		N
NOV 2,82	NOV 1,82	830	830	1345	1730	1	14.4	1	28798	2	1	102		H
NOV 3,82	NOV 2,82	830	830	2300	300	1	14.6	1	28799	2	1	107		
NOV 4,82	NOV 3,82	830	830	1815	2400	1	12.7	1	28800	2	1	101		
NOV 5,82	NOV 4,82	830	830	830	1600	1	10.5	1	28801	2	1	98		
NOV 6,82	NOV 5,82	830	830	1800	2000	3	1.9	2	28802	2	1	114		H
NOV 11,82	NOV 10,82	830	830	300	600	1	0.5	2	28803	2	1	249		N
NOV 12,82	NOV 11,82	830	830	1700	2100	1	8.4	2	28804	2	1	108		
NOV 13,82	NOV 12,82	830	830	1045	1300	1	6.3	2	28805	2	1	125		N
NOV 14,82	NOV 13,82	830	830	****	****	*	6.3	2	28806	2	1	24		NM
NOV 15,82	NOV 14,82	830	830	2030	2300	2	2.3	2	28807	2	1	****	EK	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05 PAGE : 5

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH4.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L	
SEP 2,82	SEP 1,82		190.0	128.0	3.52		3.48		0.3640		12.85	U	1.34	
SEP 3,82	SEP 2,82		255.0	19.5	4.66		4.76		0.0550		2.60		0.34	
SEP 4,82	SEP 3,82		45.0	******	******	U	6.25		0.0312		0.80		0.08	
SEP 6,82	SEP 5,82		280.0	39.0	4.16		4.14		0.1028		2.60		0.93	
SEP 7,82	SEP 6,82		130.0	29.9	******		4.22		0.0698		2.85		0.44	
SEP 13,82	SEP 12,82		140.0	******	3.55		3.56		0.3400		17.20		2.41	
SEP 14,82	SEP 13,82		350.0	14.6	4.44		4.56		0.0386		1.50		0.15	
SEP 15,82	SEP 14,82		280.0	32.0	4.08		4.14		0.0796		3.05		0.44	
SEP 16,82	SEP 15,82		40.0	******	******		4.11		0.0952		4.35		0.82	
SEP 18,82	SEP 17,82		1565.0	19.7	4.35		4.29		0.0642		1.75		0.28	
SEP 21,82	SEP 20,82		135.0	39.0	4.18		4.13		0.0972		5.10		1.06	
SEP 22,82	SEP 21,82		45.0	******	******		4.04		0.1072		2.70		0.82	
SEP 23,82	SEP 22,82		180.0	******	4.28		4.32		0.0604		1.20		0.37	
SEP 24,82	SEP 23,82		13.0	******	******		******		******		******		******	
SEP 25,82	SEP 24,82		608.0	40.0	3.98		3.98		0.1316		3.30		0.56	
SEP 27,82	SEP 26,82		261.0	7.7	4.63		4.75		0.0392		0.50		0.10	
SEP 28,82	SEP 27,82		264.0	8.0	4.54		4.80		0.0416		0.70		0.10	
OCT 2,82	OCT 1,82		52.0	******	******		3.82		0.1632		5.70		0.99	
OCT 8,82	OCT 7,82		490.0	60.0	3.92		3.81		0.1658		6.05		0.63	
OCT 9,82	OCT 8,82		110.0	******	******	U	6.48	U	0.0436	U	7.00	U	1.73	
OCT 11,82	OCT 10,82		455.0	33.9	4.17		4.05		0.1054		3.40		0.36	
OCT 12,82	OCT 11,82		150.0	******	******		3.68		0.2360		7.80		2.27	
OCT 14,82	OCT 13,82		40.0	******	******		4.32		0.0786		5.10		1.50	
OCT 15,82	OCT 14,82	U	80.0	******	4.70		******		******		******		******	
OCT 16,82	OCT 15,82		80.0	******	******		5.17		0.0292		0.55		0.02	
OCT 17,82	OCT 16,82		25.0	******	******		5.22		0.0324		0.50		0.02	
OCT 21,82	OCT 20,82		560.0	22.5	4.19		4.25		0.0688		2.40		0.26	
OCT 22,82	OCT 21,82		25.0	******	******	U	5.88		0.0236		******		******	
OCT 30,82	OCT 29,82	U	20.0	******	******	U	6.95		0.0208		******		******	
NOV 1,82	OCT 31,82		65.0	******	******		4.21		0.0754		2.60		0.52	
NOV 2,82	NOV 1,82		950.0	9.0	******	U	5.60	U	0.0388		1.50		0.23	
NOV 3,82	NOV 2,82		1005.0	26.7	******		4.20		0.0802		2.25		0.50	
NOV 4,82	NOV 3,82		830.0	7.0	4.73		4.96		0.0310		0.35		0.11	
NOV 5,82	NOV 4,82		665.0	11.2	4.54		4.54		0.0404		1.00		0.19	
NOV 6,82	NOV 5,82		140.0	******	******		4.69		0.0430		1.45		0.32	
NOV 11,82	NOV 10,82		80.0	******	******		3.87		0.1788		5.80		1.79	
NOV 12,82	NOV 11,82		585.0	37.0	4.07		4.12		0.1126		3.20		0.60	
NOV 13,82	NOV 12,82		505.0	20.5	4.36		4.42		0.0678		2.35		0.29	
NOV 14,82	NOV 13,82	U	100.0	******	******		4.02		0.1244		2.65		1.30	
NOV 15,82	NOV 14,82		******	******	******		******		******		******		******	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05 PAGE : 6

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 2,82	SEP 1,82	0.22	0.26	0.040	0.025	0.040	0.820	0.3311
SEP 3,82	SEP 2,82	0.34	0.14	0.020	0.020	0.010	0.690	0.0174
SEP 4,82	SEP 3,82	******	0.10	******	******	******	******	U 0.0006
SEP 6,82	SEP 5,82	0.89	0.20	0.180	0.065	0.035	0.800	0.0724
SEP 7,82	SEP 6,82	0.10	0.14	0.015	0.020	0.050	0.400	0.0603
SEP 13,82	SEP 12,82	******	0.60	******	******	******	1.800	0.2754
SEP 14,82	SEP 13,82	0.09	0.14	0.010	0.020	0.030	0.062	0.0275
SEP 15,82	SEP 14,82	0.12	0.14	0.020	0.020	0.030	0.288	0.0724
SEP 16,82	SEP 15,82	******	0.36	******	******	******	******	0.0776
SEP 18,82	SEP 17,82	U 0.90	0.08	U 0.140	U 0.105	U 0.080	0.196	0.0513
SEP 21,82	SEP 20,82	******	0.41	******	******	******	******	0.0741
SEP 22,82	SEP 21,82	******	0.25	******	******	******	******	0.0912
SEP 23,82	SEP 22,82	0.12	0.14	<W 0.005	0.050	0.020	0.090	0.0479
SEP 24,82	SEP 23,82	******	******	******	******	******	******	******
SEP 25,82	SEP 24,82	0.05	0.12	<W 0.005	0.045	0.025	0.386	0.1047
SEP 27,82	SEP 26,82	0.05	0.08	<W 0.005	0.030	0.030	0.112	0.0174
SEP 28,82	SEP 27,82	0.06	0.07	<W 0.005	0.030	0.020	0.216	0.0158
OCT 2,82	OCT 1,82	******	0.46	******	******	******	******	0.1514
OCT 8,82	OCT 7,82	0.22	0.22	0.015	0.025	0.050	0.620	0.1549
OCT 9,82	OCT 8,82	U 2.00	U 0.63	U 0.400	U 0.200	U 0.230	U 1.840	U 0.0003
OCT 11,82	OCT 10,82	0.18	0.11	0.010	0.025	0.050	0.318	0.0891
OCT 12,82	OCT 11,82	0.68	0.52	0.075	0.180	0.270	1.480	0.2089
OCT 14,82	OCT 13,82	******	******	******	******	******	******	0.0479
OCT 15,82	OCT 14,82	******	******	******	******	******	******	******
OCT 16,82	OCT 15,82	******	0.11	******	******	******	******	0.0068
OCT 17,82	OCT 16,82	******	0.19	******	******	******	******	0.0060
OCT 21,82	OCT 20,82	0.20	0.18	0.055	0.035	0.125	0.148	0.0562
OCT 22,82	OCT 21,82	******	******	******	******	******	******	U 0.0013
OCT 30,82	OCT 29,82	******	******	******	******	******	******	U 0.0001
NOV 1,82	OCT 31,82	0.50	0.13	0.070	0.060	0.100	******	0.0617
NOV 2,82	NOV 1,82	0.26	<W 0.01	0.020	0.080	0.025	U 0.590	U 0.0025
NOV 3,82	NOV 2,82	0.16	0.10	0.030	0.045	0.070	0.318	0.0631
NOV 4,82	NOV 3,82	0.02	<W 0.01	<W 0.005	<W 0.005	<W 0.005	0.040	0.0110
NOV 5,82	NOV 4,82	0.03	0.02	<W 0.005	<W 0.005	<W 0.005	0.080	0.0288
NOV 6,82	NOV 5,82	0.12	0.08	0.010	0.030	0.035	0.610	0.0204
NOV 11,82	NOV 10,82	0.91	0.78	0.190	0.145	0.540	******	0.1349
NOV 12,82	NOV 11,82	0.17	0.25	0.020	0.010	0.115	0.292	0.0759
NOV 13,82	NOV 12,82	0.21	0.26	0.040	0.015	0.155	0.262	0.0380
NOV 14,82	NOV 13,82	0.33	0.48	0.030	0.010	0.035	0.290	0.0955
NOV 15,82	NOV 14,82	******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
NOV 21,82	NOV 20,82	830	830	830	1200	1	15.5	2	28808	2	1	104		
NOV 22,82	NOV 21,82	830	830	915	1130	1	2.3	2	28809	2	1	81		
NOV 24,82	NOV 23,82	830	830	1900	2100	3	18.1	2	28810	2	1	93		
NOV 25,82	NOV 24,82	830	830	2000	2200	2	****	2	28811	2	1	****	EK	
NOV 27,82	NOV 26,82	830	830	1030	1200	2	1.3	2	28812	2	1	78		
NOV 29,82	NOV 28,82	830	830	1700	830	1	19.3	2	28813	2	1	91		
NOV 30,82	NOV 29,82	830	830	830	1200	1	4.2	2	28814	2	1	109		
DEC 1,82	NOV 30,82	830	830	2300	2400	1	0.4	2	28815	2	1	175		N
DEC 3,82	DEC 2,82	830	830	1700	1830	1	23.1	2	28816	2	1	92		
DEC 4,82	DEC 3,82	830	830	100	300	1	9.3	2	28817	2	1	112		
DEC 5,82	DEC 4,82	830	830	530	630	1	0.2	2	28818	2	1	116	C	
DEC 6,82	DEC 5,82	830	830	1400	1800	1	14.3	2	28819	2	1	95		
DEC 7,82	DEC 6,82	830	830	900	1000	1	0.5	2	28820	2	1	156		N
DEC 9,82	DEC 8,82	830	830	1200	1800	2	3.1	2	28821	2	1	20	C	N
DEC 11,82	DEC 10,82	830	830	1400	1700	2	1.3	2	28822	2	1	17	C	N
DEC 12,82	DEC 11,82	830	830	300	500	2	0.9	2	28823	2	1	17		N
DEC 15,82	DEC 14,82	830	830	500	600	1	0.5	2	28824	2	1	124		N
DEC 16,82	DEC 15,82	830	830	1900	830	3	18.5	2	28825	2	1	97		
DEC 17,82	DEC 16,82	830	830	1100	1500	3	1.7	2	28826	2	1	23		N
DEC 19,82	DEC 18,82	830	830	400	830	2	4.6	2	28827	2	1	41		N
DEC 20,82	DEC 19,82	830	830	200	830	2	8.1	2	28828	2	1	61		
DEC 21,82	DEC 20,82	830	830	830	1100	2	3.1	2	28829	2	1	42		N
DEC 23,82	DEC 22,82	830	830	1100	1300	2	1.1	2	28830	2	1	8	E	N
DEC 24,82	DEC 23,82	830	830	1950	2130	1	12.1	2	28831	2	1	****	G	N
DEC 25,82	DEC 24,82	830	830	2200	2400	1	11.1	2	28832	2	1	92		
DEC 26,82	DEC 25,82	830	830	2200	2300	1	2.7	2	28833	2	1	139		N
DEC 28,82	DEC 27,82	830	830	400	600	1	3.1	2	28834	2	1	87		
DEC 29,82	DEC 28,82	830	830	930	1015	1	0.7	2	28835	2	1	135		N
DEC 30,82	DEC 29,82	830	830	945	1115	2	3.3	2	28836	2	1	32		N
JAN 1,83	DEC 31,82	830	830	1400	1900	2	2.3	2	28837	2	1	75		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05 PAGE : 8

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
NOV 21.82	NOV 20,82		1035.0	26.5	4.19		4.23		0.0874		2.40		0.36
NOV 22.82	NOV 21,82		120.0	******	******		4.16		0.0914		3.50		0.39
NOV 24.82	NOV 23,82		1090.0	12.8	4.47		4.52		0.0848		0.75		0.22
NOV 25.82	NOV 24,82		5.0	******	******		******		******		******		******
NOV 27.82	NOV 26,82		65.0	******	******	U	4.70	U	0.0404		0.95		0.43
NOV 29.82	NOV 28,82		1135.0	21.5	4.29		4.32		0.0998		1.50		0.26
NOV 30.82	NOV 29,82		295.0	19.0	4.31		4.41		0.0756		1.30		0.27
DEC 1.82	NOV 30,82		45.0	******	******		3.70		0.2640		6.95	>	2.00
DEC 3.82	DEC 2,82		1365.0	25.0	4.27		4.32		0.0858		2.20		0.19
DEC 4.82	DEC 3,82		670.0	17.0	4.41		4.51		0.0652		1.15		0.29
DEC 5.82	DEC 4,82		15.0	******	******		5.04		0.0374		******		******
DEC 6.82	DEC 5,82		875.0	19.0	4.35		4.45		0.0704		1.40		0.24
DEC 7.82	DEC 6,82		50.0	******	******		4.43		0.0670		2.50		0.64
DEC 9.82	DEC 8,82	U	40.0	******	******		4.42		0.0512		1.05		0.75
DEC 11.82	DEC 10,82	U	15.0	******	******		******		******		******		******
DEC 12.82	DEC 11,82	U	10.0	******	******		******		******		******		******
DEC 15.82	DEC 14,82		40.0	******	******		******		******		******		******
DEC 16.82	DEC 15,82		1160.0	21.6	4.26		4.36		0.0702		1.55		0.27
DEC 17.82	DEC 16,82	U	26.0	******	******		4.40		0.0606		******		******
DEC 19.82	DEC 18,82	U	121.0	******	******		4.43		0.0584		1.05		0.73
DEC 20.82	DEC 19,82		317.0	31.0	4.03		4.13		0.0920		1.30		0.76
DEC 21.82	DEC 20,82	U	85.0	******	******		4.23		0.0702		0.50		0.72
DEC 23.82	DEC 22,82	U	6.0	******	******		******		******		******		******
DEC 24.82	DEC 23,82	U	270.0	49.0	4.10		4.03		0.1278	U	5.25	U	0.90
DEC 25.82	DEC 24,82		659.0	36.0	4.10		4.09		0.1138		2.75		0.42
DEC 26.82	DEC 25,82		242.0	14.5	4.60		4.64		0.0488		1.80		0.18
DEC 28.82	DEC 27,82		174.0	18.4	******		4.48	U	0.0554		1.60		0.32
DEC 29.82	DEC 28,82		61.0	******	******		4.47		0.0606		2.25	U	0.18
DEC 30.82	DEC 29,82	U	69.0	******	******		5.11		0.0308	<T	0.05		0.06
JAN 1.83	DEC 31,82		111.0	******	******	U	5.32	U	0.0268		2.50		0.55

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAVEN LAKE/DAILY/AEROCHEM #05

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
NOV 21,82	NOV 20,82	0.05	0.11	<W 0.005	0.015	0.040	0.172	0.0589
NOV 22,82	NOV 21,82	0.25	0.11	<W 0.005	0.055	0.040	0.202	0.0692
NOV 24,82	NOV 23,82	<W 0.01	0.21	0.005	<W 0.005	0.010	0.042	0.0302
NOV 25,82	NOV 24,82	******	******	******	******	******	******	******
NOV 27,82	NOV 26,82	0.55	0.21	0.040	0.020	0.055	******	U 0.0200
NOV 29,82	NOV 28,82	0.03	0.10	<W 0.005	<W 0.005	<T 0.005	0.066	0.0479
NOV 30,82	NOV 29,82	0.02	0.09	<W 0.005	<T 0.005	0.010	0.088	0.0389
DEC 1,82	NOV 30,82	******	0.50	******	******	******	******	0.1995
DEC 3,82	DEC 2,82	0.02	0.28	0.010	<T 0.010	0.110	0.086	0.0479
DEC 4,82	DEC 3,82	0.03	0.13	0.005	<T 0.005	0.020	0.118	0.0309
DEC 5,82	DEC 4,82	******	******	******	******	******	******	0.0091
DEC 6,82	DEC 5,82	<T 0.01	0.17	0.005	<T 0.010	0.060	0.132	0.0355
DEC 7,82	DEC 6,82	******	0.12	******	******	******	******	0.0372
DEC 9,82	DEC 8,82	******	0.25	******	******	******	******	0.0380
DEC 11,82	DEC 10,82	******	******	******	******	******	******	******
DEC 12,82	DEC 11,82	******	******	******	******	******	******	******
DEC 15,82	DEC 14,82	******	******	******	******	******	******	******
DEC 16,82	DEC 15,82	0.04	0.03	<W 0.005	<W 0.005	<W 0.005	0.072	0.0437
DEC 17,82	DEC 16,82	******	******	******	******	******	******	0.0398
DEC 19,82	DEC 18,82	0.60	0.33	0.060	0.020	0.160	0.100	0.0372
DEC 20,82	DEC 19,82	0.09	0.16	0.015	0.015	0.080	0.066	0.0741
DEC 21,82	DEC 20,82	0.10	0.09	0.010	0.015	0.030	******	0.0589
DEC 23,82	DEC 22,82	******	******	******	******	******	******	******
DEC 24,82	DEC 23,82	U 1.05	U 0.70	U 0.100	U 0.160	U 0.460	0.490	0.0933
DEC 25,82	DEC 24,82	0.08	0.39	0.030	U 0.335	0.180	0.140	0.0813
DEC 26,82	DEC 25,82	0.20	0.12	0.025	0.025	0.140	0.266	0.0229
DEC 28,82	DEC 27,82	U 0.42	0.11	0.015	0.015	0.070	U 0.060	0.0331
DEC 29,82	DEC 28,82	U 0.47	U 0.31	U 0.115	U 0.225	U 0.270	******	0.0339
DEC 30,82	DEC 29,82	******	0.06	******	******	******	******	0.0078
JAN 1,83	DEC 31,82	******	0.45	******	******	******	0.008	U 0.0048

PART V

SOUTHEASTERN REGION

DAILY PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/SES #11 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 3.82	JAN 2.82	830	920	100	600	*	****	2	23190	2	1	****	E	
JAN 5.82	JAN 3.82	830	850	100	500	3	38.5	2	23192	2	1	****	HG	Z
JAN 7.82	JAN 6.82	830	950	2400	600	2	****	*	23194	2	1	****		
JAN 9.82	JAN 8.82	900	1030	1745	1000	2	3.3	2	23196	2	1	104		
JAN 10.82	JAN 9.82	1030	900	100	600	2	****	2	23198	2	1	****		
JAN 11.82	JAN 10.82	900	1300	1630	1000	*	****	2	23200	2	1	****		JH
JAN 14.82	JAN 13.82	900	750	1530	500	2	0.6	2	23202	2	1	275		N
JAN 16.82	JAN 15.82	810	850	100	850	2	****	2	23204	2	1	****		
JAN 17.82	JAN 16.82	850	1200	850	1600	*	2.3	2	23206	2	1	38		N
JAN 20.82	JAN 19.82	810	830	2200	500	2	****	2	23208	2	1	****		
JAN 23.82	JAN 22.82	830	920	100	920	2	5.8	2	23210	2	1	102		
JAN 24.82	JAN 23.82	920	850	920	1430	3	8.5	2	23212	2	1	94		
JAN 29.82	JAN 28.82	900	850	730	850	2	****	2	23214	2	1	****		
JAN 30.82	JAN 29.82	850	1000	730	1000	2	2.9	2	23216	2	1	138		N
JAN 31.82	JAN 30.82	1000	850	1000	1330	2	0.9	2	23218	2	1	296		N
FEB 1.82	JAN 31.82	850	1000	1400	1000	2	30.5	2	23220	2	1	81		
FEB 3.82	FEB 2.82	930	900	500	830	3	****	2	23222	2	1	****		
FEB 4.82	FEB 3.82	900	920	1400	200	3	10.4	2	23224	2	1	101		J
FEB 6.82	FEB 5.82	920	1040	1700	500	2	5.0	2	23226	2	1	107		J
FEB 9.82	FEB 8.82	900	915	300	915	2	****	*	23228	2	1	****		
FEB 10.82	FEB 9.82	915	915	915	1500	2	0.8	2	23230	2	1	134		N
FEB 15.82	FEB 14.82	950	1030	100	600	2	****	2	23232	2	1	****		
FEB 19.82	FEB 18.82	900	930	430	930	2	1.4	2	23234	2	1	155		N
FEB 20.82	FEB 19.82	930	1000	930	1700	3	****	2	23236	2	1	****		
FEB 23.82	FEB 22.82	900	1000	400	930	2	****	2	23238	2	1	****		
MAR 2.82	MAR 1.82	900	930	1700	1900	2	0.3	2	23240	2	1	****	GH	
MAR 5.82	MAR 4.82	900	1000	1400	2200	3	8.7	2	23242	2	1	121		N
MAR 7.82	MAR 6.82	900	1200	200	1000	2	3.0	2	23244	2	1	84		
MAR 10.82	MAR 9.82	700	830	700	1700	2	1.9	2	23246	2	1	212		N
MAR 11.82	MAR 10.82	830	845	2100	300	3	2.9	2	23247	2	1	30		N
MAR 12.82	MAR 11.82	845	1600	1300	1800	1	3.9	2	23248	2	1	100		
MAR 13.82	MAR 12.82	1600	815	600	815	1	****	*	23250	2	1	****		
MAR 14.82	MAR 13.82	815	715	815	1100	3	8.1	2	23252	2	1	104		
MAR 17.82	MAR 16.82	830	900	1800	900	2	10.4	2	23254	2	1	93		
MAR 18.82	MAR 17.82	900	920	900	1100	2	****	*	23256	2	1	****		
MAR 19.82	MAR 18.82	920	730	1800	2400	2	5.1	2	23258	2	1	****	GH	HM
MAR 22.82	MAR 21.82	800	700	1200	1400	3	11.3	2	23260	2	1	92		
MAR 26.82	MAR 25.82	700	705	1900	705	3	13.7	2	23262	2	1	101		
MAR 27.82	MAR 26.82	705	700	705	2330	3	0.9	2	23264	2	1	32		N
MAR 30.82	MAR 29.82	700	1000	100	600	1	4.5	2	23266	2	1	111		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/SES #11

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM		PH FIELD		PH LAB	TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
JAN 3,82	JAN 2,82		4.0	******		******		******	******		******		******
JAN 5,82	JAN 3,82		3924.0	14.8		4.46		4.55	0.0694		1.15		0.20
JAN 7,82	JAN 6,82		48.0	******		******	U	4.01	******		4.40	U	3.72
JAN 9,82	JAN 8,82		568.0	21.4		4.34		4.35	0.0846		0.60		0.67
JAN 10,82	JAN 9,82		39.0	******		******		******	******		0.55		0.34
JAN 11,82	JAN 10,82		845.0	7.8	U	5.38	U	5.87	0.0436		0.55		0.24
JAN 14,82	JAN 13,82		271.0	18.0		******		4.41	0.0890		0.70		0.40
JAN 16,82	JAN 15,82		63.0	******		******		4.18	******		1.00		0.95
JAN 17,82	JAN 16,82	U	144.0	38.5		******		4.09	0.1276		2.25		0.97
JAN 20,82	JAN 19,82		100.0	******		******		4.02	******		2.05		1.51
JAN 23,82	JAN 22,82		971.0	7.1		4.70		5.00	0.0508		0.60		0.15
JAN 24,82	JAN 23,82		1321.0	18.2		4.28		4.40	0.0690		1.35		0.33
JAN 29,82	JAN 28,82		50.0	******		******	U	3.75	******	U	16.20	U	3.63
JAN 30,82	JAN 29,82		659.0	13.0		4.53		4.51	0.0608		0.25		0.36
JAN 31,82	JAN 30,82		437.0	26.6		4.24		4.18	0.0990		1.60		0.41
FEB 1,82	JAN 31,82		4063.0	15.2		4.42		4.40	0.0616		0.65		0.31
FEB 3,82	FEB 2,82		209.0	******		******		4.10	******		2.20		0.80
FEB 4,82	FEB 3,82		1725.0	20.8	U	3.83		4.22	0.0818		1.25		0.32
FEB 6,82	FEB 5,82		885.0	41.7		3.68		3.95	0.1346		1.10		1.15
FEB 9,82	FEB 8,82		247.0	36.4		******		4.03	0.1180		0.45		1.17
FEB 10,82	FEB 9,82		177.0	******		******		3.91	******		1.00		1.18
FEB 15,82	FEB 14,82		51.0	******		******		4.32	******		1.05		0.45
FEB 19,82	FEB 18,82		356.0	40.5		******		4.08	0.1204		2.30		1.16
FEB 20,82	FEB 19,82		55.0	******		******		3.15	******	>	10.00	>	2.00
FEB 23,82	FEB 22,82		172.0	68.0		******		4.02	******		6.20		2.13
MAR 2,82	MAR 1,82		48.0	******		******	U	3.72	******	U	11.50	U	4.50
MAR 5,82	MAR 4,82		1736.0	45.0		******		3.99	0.1454		2.50		0.97
MAR 7,82	MAR 6,82		415.0	47.3		******		3.98	0.1528		2.00		1.17
MAR 10,82	MAR 9,82		663.0	40.3		******		4.04	0.1238		1.20		1.08
MAR 11,82	MAR 10,82	U	147.0	******		******		3.43	******		6.10		3.92
MAR 12,82	MAR 11,82		644.0	34.4		******		4.14	0.1276		2.20		0.53
MAR 13,82	MAR 12,82		53.0	******		******		3.32	******	U	25.00	U	2.66
MAR 14,82	MAR 13,82		1386.0	32.9		******		4.19	0.1080		3.20		0.34
MAR 17,82	MAR 16,82		1599.0	21.2		******		4.45	0.0786		1.95		0.43
MAR 18,82	MAR 17,82		84.0	******		******		3.95	******		3.20		0.64
MAR 19,82	MAR 18,82		1000.0	62.2		******		3.88	0.1418		2.00	<W	0.01
MAR 22,82	MAR 21,82		1710.0	60.0		******		3.95	0.1620		5.35		0.96
MAR 26,82	MAR 25,82		2290.0	102.0		******		3.79	0.2444		7.80		2.42
MAR 27,82	MAR 26,82	U	48.0	******		******		4.19	0.1104		4.35		0.34
MAR 30,82	MAR 29,82		824.0	36.0		******		4.21	0.1088		3.20		0.74

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/SES #11 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 3,82	JAN 2,82	******	******	******	******	******	******	******
JAN 5,82	JAN 3,82	0.07	0.07	0.010	0.010	0.020	0.156	0.0282
JAN 7,82	JAN 6,82	******	U 2.96	******	******	******	******	U 0.0977
JAN 9,82	JAN 8,82	0.18	0.32	0.010	0.010	0.100	0.110	0.0447
JAN 10,82	JAN 9,82	******	0.41	******	******	******	******	******
JAN 11,82	JAN 10,82	U 0.68	0.48	U 0.105	0.030	0.260	0.020	U 0.0013
JAN 14,82	JAN 13,82	0.04	0.37	0.005	0.010	0.040	0.196	0.0389
JAN 16,82	JAN 15,82	******	0.93	******	******	******	******	0.0661
JAN 17,82	JAN 16,82	0.29	0.35	0.025	0.040	0.110	0.302	0.0813
JAN 20,82	JAN 19,82	0.50	U 1.13	0.075	0.060	U 0.740	0.286	0.0955
JAN 23,82	JAN 22,82	0.06	0.08	0.020	0.020	0.050	0.204	0.0100
JAN 24,82	JAN 23,82	0.16	0.12	0.025	0.030	0.060	0.134	0.0398
JAN 29,82	JAN 28,82	******	U 2.42	******	******	******	******	U 0.1778
JAN 30,82	JAN 29,82	0.12	0.28	0.010	0.010	0.150	0.020	0.0309
JAN 31,82	JAN 30,82	0.02	0.14	<T 0.005	0.020	0.030	0.190	0.0661
FEB 1,82	JAN 31,82	0.05	0.05	0.005	0.030	0.030	0.026	0.0398
FEB 3,82	FEB 2,82	0.18	0.22	0.020	0.050	0.140	0.242	0.0794
FEB 4,82	FEB 3,82	0.01	0.17	<T 0.005	0.005	0.020	0.124	0.0603
FEB 6,82	FEB 5,82	0.17	0.26	<T 0.005	<T 0.005	0.055	0.062	0.1122
FEB 9,82	FEB 8,82	0.24	0.45	0.030	0.020	0.275	0.024	0.0933
FEB 10,82	FEB 9,82	0.09	0.57	<T 0.005	0.005	0.080	0.036	0.1230
FEB 15,82	FEB 14,82	******	0.58	******	******	******	******	0.0479
FEB 19,82	FEB 18,82	0.36	0.28	0.105	0.015	0.445	0.282	0.0832
FEB 20,82	FEB 19,82	******	U 1.12	******	******	******	******	0.7079
FEB 23,82	FEB 22,82	1.01	0.69	0.105	0.055	0.145	2.000	0.0955
MAR 2,82	MAR 1,82	******	U 2.20	******	******	******	******	U 0.1905
MAR 5,82	MAR 4,82	0.08	0.14	0.005	0.015	0.055	0.318	0.1023
MAR 7,82	MAR 6,82	0.14	0.24	0.025	0.010	0.125	0.270	0.1047
MAR 10,82	MAR 9,82	0.12	0.36	0.020	0.055	0.080	0.322	0.0912
MAR 11,82	MAR 10,82	0.58	0.74	0.075	0.040	0.360	0.780	0.3715
MAR 12,82	MAR 11,82	0.03	0.17	0.015	0.010	0.080	0.222	0.0724
MAR 13,82	MAR 12,82	******	U 1.78	******	******	******	******	0.4786
MAR 14,82	MAR 13,82	0.10	0.14	0.040	0.025	0.085	0.348	0.0646
MAR 17,82	MAR 16,82	0.31	0.04	0.040	0.015	0.035	0.328	0.0355
MAR 18,82	MAR 17,82	0.40	0.20	0.040	0.030	0.120	******	0.1122
MAR 19,82	MAR 18,82	0.23	U 1.50	0.020	0.010	0.030	0.210	0.1318
MAR 22,82	MAR 21,82	0.35	0.10	0.035	0.030	0.055	0.660	0.1122
MAR 26,82	MAR 25,82	0.44	0.31	0.090	0.030	0.130	1.510	0.1622
MAR 27,82	MAR 26,82	******	0.22	******	******	******	******	0.0646
MAR 30,82	MAR 29,82	0.54	0.31	0.110	0.015	0.190	0.282	0.0617

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/SES #11 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAR 31.82	MAR 30.82	1000	800	1800	100	1	14.5	2	23268	2	1	102		
APR 4.82	APR 3.82	630	1200	630	1200	3	25.6	2	23270	2	1	100		
APR 5.82	APR 4.82	1200	900	1300	200	2	1.1	2	23272	2	1	34		N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/SES #11 PAGE : 5

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAR 31.82	MAR 30.82	2435.0	17.9	******	4.74	0.0510	2.50	0.46
APR 4.82	APR 3.82	4225.0	14.4	******	4.65	0.0462	1.25	0.21
APR 5.82	APR 4.82	U 62.0	******	******	U 6.16	0.0250	2.25	0.44

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/SES #11 PAGE : 6

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAR 31,82	MAR 30,82	0.37	0.10	0.055	0.010	0.045	0.560	0.0182
APR 4,82	APR 3,82	0.37	0.03	0.030	0.020	0.025	0.096	0.0224
APR 5,82	APR 4,82	******	0.55	******	******	******	******	U 0.0007

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
APR 12,82	APR 11,82	600	750	630	1800	3	1.2	1	23274	2	1	24		N
APR 13,82	APR 12,82	750	1100	1900	1000	1	2.6	1	23275	2	1	42	B	N
APR 18,82	APR 17,82	700	1200	1030	1750	1	6.8	1	23276	2	1	16		N
APR 21,82	APR 20,82	730	1000	900	200	1	12.5	1	23277	2	1	****	GH	
MAY 9,82	MAY 8,82	600	930	800	1700	1	****	*	23280	2	1	****		
MAY 20,82	MAY 19,82	700	730	1000	1300	1	5.2	1	23281	2	1	95		
MAY 21,82	MAY 20,82	730	730	1000	1630	1	5.4	1	23282	2	1	90		
MAY 23,82	MAY 22,82	730	1200	2000	1200	1	2.6	1	23283	2	1	28		N
MAY 24,82	MAY 23,82	1200	850	1200	850	1	5.0	1	23284	2	1	87		T
MAY 25,82	MAY 24,82	850	900	850	1000	1	2.2	1	23285	2	1	95		
MAY 29,82	MAY 28,82	730	800	1030	800	1	18.0	1	23286	2	1	100		
MAY 31,82	MAY 30,82	800	900	1800	2300	1	4.2	1	23287	2	1	84		T
JUN 2,82	JUN 1,82	800	730	600	2300	1	23.2	1	23288	2	1	71		T
JUN 6,82	JUN 5,82	730	930	1400	930	1	20.6	1	23289	2	1	97		HC
JUN 7,82	JUN 6,82	930	930	930	1800	1	4.6	1	23290	2	1	79		H
JUN 11,82	JUN 10,82	730	730	100	500	1	3.8	1	23291	2	1	111		
JUN 14,82	JUN 13,82	730	900	900	100	1	0.9	1	23292	2	1	190		NT
JUN 16,82	JUN 15,82	900	900	1600	200	1	7.0	1	23293	2	1	114	J	T
JUN 19,82	JUN 18,82	730	900	100	700	1	3.0	1	23294	2	1	126		N
JUN 20,82	JUN 19,82	900	930	1600	1800	1	5.6	1	23295	2	1	115		
JUN 21,82	JUN 20,82	930	900	1500	800	1	18.6	1	23296	2	1	108		
JUN 22,82	JUN 21,82	900	830	1300	600	1	4.2	1	23297	2	1	116		
JUN 23,82	JUN 22,82	830	800	2300	400	*	0.4	2	23298	2	1	54		J
JUN 24,82	JUN 23,82	800	730	1200	100	1	5.3	2	23299	2	1	94		JHCM
JUN 26,82	JUN 25,82	800	715	****	****	*	0.7	2	23300	2	1	6		N
JUL 3,82	JUL 2,82	800	800	2200	200	1	2.0	2	23301	2	1	56	BCD	J
JUL 12,82	JUL 11,82	800	830	2000	2300	1	24.1	1	23302	2	1	104		
JUL 18,82	JUL 17,82	800	900	1830	2100	1	14.7	1	23303	2	1	100		
JUL 20,82	JUL 19,82	800	730	1230	1600	1	6.0	1	23304	2	1	93		
JUL 28,82	JUL 27,82	800	756	100	756	1	6.7	1	23308	2	1	108		
JUL 29,82	JUL 28,82	756	900	756	1930	1	16.3	1	23309	2	1	98		
JUL 31,82	JUL 30,82	800	830	905	300	1	22.0	1	23310	2	1	101		J
AUG 1,82	JUL 31,82	830	900	2100	2300	1	1.4	1	23311	2	1	80		
AUG 3,82	AUG 2,82	800	730	1630	1930	1	1.6	1	23312	2	1	78		
AUG 20,82	AUG 19,82	730	745	2000	300	1	7.4	1	23313	2	1	93		
AUG 23,82	AUG 22,82	800	930	2030	700	1	5.2	1	23314	2	1	94		
AUG 25,82	AUG 24,82	930	800	300	800	1	22.5	1	23315	2	1	****	FE	
AUG 26,82	AUG 25,82	800	700	800	1200	1	60.6	1	23316	2	1	102		
AUG 28,82	AUG 27,82	700	1200	1545	1700	1	8.2	1	23317	2	1	102		
AUG 29,82	AUG 28,82	1200	800	1445	1645	1	2.5	1	23318	2	1	86		M

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
APR 12,82	APR 11,82	U	19.0	******	******		4.07		0.1202		******		******
APR 13,82	APR 12,82	U	70.0	******	******		4.08		0.1210		5.10		0.85
APR 18,82	APR 17,82	U	70.0	******	******		4.06		0.1176		4.25		0.82
APR 21,82	APR 20,82		666.0	******	******		4.18		0.0910		3.20		0.62
MAY 9,82	MAY 8,82		1705.0	36.2	******		4.21		0.1092		3.60		0.35
MAY 20,82	MAY 19,82		319.0	U 173.0	******		3.37		0.4432		15.30	U	2.78
MAY 21,82	MAY 20,82		313.0	8.4	******		4.98		0.0278		0.95		0.11
MAY 23,82	MAY 22,82	U	48.0	******	******		4.30		0.0922		2.80		0.38
MAY 24,82	MAY 23,82		279.0	68.0	******		3.72		0.1772		6.30		0.76
MAY 25,82	MAY 24,82		134.0	******	******		4.09		0.0900		3.05		0.22
MAY 29,82	MAY 28,82		1154.0	22.0	******		4.33		0.0566		1.40		0.31
MAY 31,82	MAY 30,82		227.0	45.7	******		3.91		0.1228		4.50		0.45
JUN 2,82	JUN 1,82		1070.0	68.0	******		3.71		0.1808		6.95		0.63
JUN 6,82	JUN 5,82		1294.0	4.2	******		5.66		0.0214		0.35		0.04
JUN 7,82	JUN 6,82		234.0	11.1	******		5.03		0.0332		1.40		0.15
JUN 11,82	JUN 10,82		271.0	64.5	******		3.80		0.1670		6.05		0.99
JUN 14,82	JUN 13,82		110.0	67.0	******		3.72		0.1630		4.85	U	1.41
JUN 16,82	JUN 15,82		513.0	100.0	******		3.61		0.2392		9.50		1.33
JUN 19,82	JUN 18,82		244.0	129.0	******		3.52		0.3024		12.20		2.07
JUN 20,82	JUN 19,82		413.0	89.0	******		3.67		0.2140		7.45		0.99
JUN 21,82	JUN 20,82		1292.0	37.6	******		4.08		0.1058		3.15		0.53
JUN 22,82	JUN 21,82		314.0	10.8	******		4.70		0.0364		1.00		0.19
JUN 23,82	JUN 22,82		14.0	******	3.30		3.62	U	0.3240		******		******
JUN 24,82	JUN 23,82		320.0	4.2	U 5.50		U 6.50		0.0254		0.30		0.03
JUN 26,82	JUN 25,82	U	3.0	******	******		******		******		******		******
JUL 3,82	JUL 2,82		72.0	******	U 6.93		U 8.14		******	U	12.50		0.71
JUL 12,82	JUL 11,82		1622.0	45.0	4.05		3.99		0.1268		5.10		0.33
JUL 18,82	JUL 17,82		950.0	65.0	4.01		3.88		0.1526		6.75		0.47
JUL 20,82	JUL 19,82		358.0	25.1	4.46		4.45		0.0536		2.50		0.47
JUL 28,82	JUL 27,82		465.0	10.3	4.62		4.69		0.0308		0.95		0.14
JUL 29,82	JUL 28,82		1034.0	5.2	4.87		5.10		0.0214		0.30		0.07
JUL 31,82	JUL 30,82		1426.0	36.2	4.36		4.07		0.0976		2.85		0.47
AUG 1,82	JUL 31,82		72.0	******	******		3.87		0.1546		6.30		0.68
AUG 3,82	AUG 2,82		80.0	******	******		U 6.22		0.0336		2.30		0.75
AUG 20,82	AUG 19,82		444.0	35.5	4.32		4.35		0.0754		5.90		0.74
AUG 23,82	AUG 22,82		314.0	38.5	4.10		4.03		0.1070		3.25		0.53
AUG 25,82	AUG 24,82		******	******	******		******		******		******		******
AUG 26,82	AUG 25,82		3994.0	12.6	4.59		4.54		0.0548		1.30		0.06
AUG 28,82	AUG 27,82		539.0	30.0	4.24		4.16		0.0928		3.10		0.31
AUG 29,82	AUG 28,82		139.0	******	******		5.32		0.0248	<T	0.05		0.03

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB UG/L
APR 12,82	APR 11,82	******	******	******	******	******	******	0.0851
APR 13,82	APR 12,82	******	0.24	******	******	******	******	0.0832
APR 18,82	APR 17,82	0.38	0.26	0.060	0.050	0.105	0.390	0.0871
APR 21,82	APR 20,82	******	0.16	******	******	******	******	0.0661
MAY 9,82	MAY 8,82	0.07	0.07	0.015	<T 0.010	<T 0.010	0.362	0.0617
MAY 20,82	MAY 19,82	0.73	0.68	0.095	0.090	0.045	0.940	0.4266
MAY 21,82	MAY 20,82	0.09	<T 0.02	0.015	0.050	<T 0.010	0.218	0.0105
MAY 23,82	MAY 22,82	******	0.06	******	******	******	******	0.0501
MAY 24,82	MAY 23,82	0.06	0.07	0.005	0.040	<T 0.010	0.348	0.1905
MAY 25,82	MAY 24,82	0.03	0.02	<W 0.005	<T 0.015	<T 0.010	0.148	0.0813
MAY 29,82	MAY 28,82	<T 0.01	0.04	<W 0.005	<T 0.010	<T 0.010	0.094	0.0468
MAY 31,82	MAY 30,82	0.03	0.07	0.005	0.050	0.015	0.410	0.1230
JUN 2,82	JUN 1,82	0.07	0.13	0.010	0.040	0.015	0.450	0.1950
JUN 6,82	JUN 5,82	0.05	0.02	0.010	0.035	0.050	0.134	0.0022
JUN 7,82	JUN 6,82	0.05	0.07	0.010	0.050	0.055	0.480	0.0093
JUN 11,82	JUN 10,82	0.25	0.16	0.045	0.020	0.035	0.720	0.1585
JUN 14,82	JUN 13,82	******	0.29	******	******	******	******	0.1905
JUN 16,82	JUN 15,82	0.77	0.36	0.130	0.125	0.040	0.650	0.2455
JUN 19,82	JUN 18,82	0.46	0.54	0.075	0.045	0.035	U 1.810	0.3020
JUN 20,82	JUN 19,82	0.02	0.22	0.015	0.020	0.015	0.540	0.2138
JUN 21,82	JUN 20,82	0.02	0.09	0.015	<W 0.005	<T 0.010	0.450	0.0832
JUN 22,82	JUN 21,82	<T 0.01	0.02	0.015	<W 0.005	<T 0.010	0.162	0.0200
JUN 23,82	JUN 22,82	******	******	******	******	******	******	0.2399
JUN 24,82	JUN 23,82	0.09	<W 0.01	0.025	0.040	0.030	0.042	U 0.0003
JUN 26,82	JUN 25,82	******	******	******	******	******	******	******
JUL 3,82	JUL 2,82	******	U 0.91	******	******	******	******	U 0.0000
JUL 12,82	JUL 11,82	0.06	0.06	0.010	<T 0.010	0.020	0.490	0.1023
JUL 18,82	JUL 17,82	0.20	0.08	0.040	0.080	0.020	0.294	0.1318
JUL 20,82	JUL 19,82	0.23	0.06	0.025	0.085	0.025	0.510	0.0355
JUL 28,82	JUL 27,82	0.13	0.04	0.025	0.040	0.025	0.144	0.0204
JUL 29,82	JUL 28,82	0.02	<T 0.02	0.015	<T 0.010	<T 0.010	0.078	0.0079
JUL 31,82	JUL 30,82	0.10	0.12	0.020	0.010	<T 0.005	0.256	0.0851
AUG 1,82	JUL 31,82	******	0.15	******	******	******	******	0.1349
AUG 3,82	AUG 2,82	******	0.15	******	******	******	******	U 0.0006
AUG 20,82	AUG 19,82	1.03	0.15	0.195	0.065	<T 0.010	1.030	0.0447
AUG 23,82	AUG 22,82	0.10	0.09	0.025	0.065	<T 0.005	0.228	0.0933
AUG 25,82	AUG 24,82	******	******	******	******	******	******	******
AUG 26,82	AUG 25,82	0.10	<T 0.02	<W 0.005	<T 0.010	<W 0.005	0.112	0.0288
AUG 28,82	AUG 27,82	0.13	0.06	0.025	<T 0.015	<T 0.005	0.278	0.0692
AUG 29,82	AUG 28,82	0.04	0.03	0.015	<T 0.005	<T 0.005	0.006	0.0048

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
SEP 2,82	SEP 1,82	800	900	1930	200	1	21.6	1	23319	2	1	102		
SEP 7,82	SEP 6,82	800	1000	1200	1700	1	7.6	1	23320	2	1	92		
SEP 15,82	SEP 14,82	800	730	1500	1700	1	6.0	1	23321	2	1	76		T
SEP 19,82	SEP 18,82	600	900	630	800	1	10.6	1	23322	2	1	69		HM
SEP 21,82	SEP 20,82	700	800	200	600	1	6.5	1	23323	2	1	31		NT
SEP 23,82	SEP 22,82	800	800	100	800	1	2.6	1	23324	2	1	56		
SEP 24,82	SEP 23,82	800	750	800	1630	1	2.8	1	23325	2	1	65		
SEP 27,82	SEP 26,82	800	740	400	740	1	8.8	1	23326	2	1	92		
SEP 28,82	SEP 27,82	740	750	740	900	1	4.6	1	23327	2	1	73		
OCT 2,82	OCT 1,82	800	800	1000	1400	1	5.6	1	23328	2	1	81		J
OCT 8,82	OCT 7,82	800	900	1715	2130	1	34.0	1	23329	2	1	103	A	
OCT 13,82	OCT 12,82	800	900	1400	1800	1	1.0	1	23330	2	1	35		NT
OCT 14,82	OCT 13,82	900	800	2000	600	1	8.2	1	23331	2	1	97		
OCT 15,82	OCT 14,82	800	800	100	600	1	0.9	1	23332	2	1	55		
OCT 17,82	OCT 16,82	800	1000	815	1900	1	2.2	1	23333	2	1	85		
OCT 21,82	OCT 20,82	800	800	1730	1815	1	5.6	1	23334	2	1	91		
NOV 1,82	OCT 31,82	800	900	1800	600	1	3.4	1	23335	2	1	91		
NOV 2,82	NOV 1,82	900	830	1730	830	1	8.9	2	23336	2	1	****	E	
NOV 3,82	NOV 2,82	900	900	1500	630	1	1.5	2	23337	2	1	182		N
NOV 4,82	NOV 3,82	830	900	1830	830	1	30.5	2	23338	2	1	99		
NOV 5,82	NOV 4,82	830	830	830	1000	1	22.7	2	23339	2	1	67		
NOV 6,82	NOV 5,82	830	830	1800	2400	1	4.7	2	23340	2	1	87		
NOV 12,82	NOV 11,82	900	930	1830	830	1	1.7	2	23341	2	1	86		
NOV 13,82	NOV 12,82	930	900	1400	1700	1	10.6	2	23342	2	1	106		
NOV 21,82	NOV 20,82	900	1200	1800	1200	1	3.1	2	23343	2	1	96		
NOV 22,82	NOV 21,82	1200	900	1200	2300	1	1.2	2	23344	2	1	117		
NOV 23,82	NOV 22,82	900	930	600	930	1	0.5	2	23345	2	1	28		N
NOV 24,82	NOV 23,82	930	830	930	830	1	13.9	2	23346	2	1	96		
NOV 27,82	NOV 26,82	900	1000	900	1900	2	****	*	23347	2	1	****		
NOV 29,82	NOV 28,82	900	930	1600	930	1	8.1	2	23348	2	1	93		
NOV 30,82	NOV 29,82	930	900	930	1000	1	2.7	2	23349	2	1	110		
DEC 1,82	NOV 30,82	900	930	2400	600	1	0.5	2	23350	2	1	59		T
DEC 3,82	DEC 2,82	930	900	2200	1000	1	3.5	2	23351	2	1	98		
DEC 4,82	DEC 3,82	930	1200	130	600	1	3.2	2	23352	2	1	112		
DEC 5,82	DEC 4,82	1200	900	100	900	1	1.3	2	23353	2	1	82		
DEC 6,82	DEC 5,82	900	830	900	1300	1	4.0	2	23354	2	1	116		
DEC 7,82	DEC 6,82	800	745	1100	1630	1	0.3	2	23355	2	1	150		N
DEC 16,82	DEC 15,82	900	900	1900	500	1	17.5	2	23356	2	1	78		J
DEC 17,82	DEC 16,82	900	900	1730	200	2	4.1	2	23357	2	1	134		N
DEC 25,82	DEC 24,82	1000	600	700	900	1	7.7	2	23358	2	1	78		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L		NITRATE AS N MG/L
SEP 2,82	SEP 1,82		1415.0	38.8	4.00	4.05	0.1060	3.55		0.33
SEP 7,82	SEP 6,82		452.0	51.0	3.86	3.95	0.1412	4.80		0.45
SEP 15,82	SEP 14,82		296.0	107.0	3.62	3.51	0.2780	8.15		1.44
SEP 19,82	SEP 18,82		473.0	23.3	4.31	4.19	0.0750	2.00		0.28
SEP 21,82	SEP 20,82	U	130.0	85.0	******	3.64	0.2280	6.95		2.07
SEP 23,82	SEP 22,82		94.0	68.0	******	4.30	0.0594	2.25		0.18
SEP 24,82	SEP 23,82		117.0	106.0	******	4.10	0.0944	3.65		0.66
SEP 27,82	SEP 26,82		524.0	5.9	4.99	5.14	0.0332	0.65		0.11
SEP 28,82	SEP 27,82		218.0	24.3	4.22	4.23	0.0706	1.55		0.77
OCT 2,82	OCT 1,82		291.0	92.0	4.21	3.64	0.3196	8.35		1.24
OCT 8,82	OCT 7,82		2253.0	38.8	4.03	4.01	0.1104	4.05		0.30
OCT 13,82	OCT 12,82	U	23.0	******	******	3.42	0.3560	12.60	>	2.00
OCT 14,82	OCT 13,82		512.0	29.0	4.27	4.10	0.1014	1.90		0.67
OCT 15,82	OCT 14,82		32.0	******	******	4.54	0.0496	0.80		0.40
OCT 17,82	OCT 16,82		120.0	******	******	4.55	0.0478	1.10	<T	0.02
OCT 21,82	OCT 20,82		328.0	28.7	4.28	4.19	0.0852	2.95		0.54
NOV 1,82	OCT 31,82		200.0	54.0	3.87	3.91	0.1402	4.30		0.84
NOV 2,82	NOV 1,82		******	******	******	******	******	******		******
NOV 3,82	NOV 2,82	<	175.0	******	******	4.02	0.1040	3.35		0.68
NOV 4,82	NOV 3,82		1955.0	16.3	******	4.35	0.0624	1.25		0.19
NOV 5,82	NOV 4,82		985.0	******	******	4.88	0.0292	0.45		0.07
NOV 6,82	NOV 5,82		265.0	19.0	******	4.37	0.0646	1.20		0.48
NOV 12,82	NOV 11,82		94.0	******	******	3.82	0.1516	4.00		0.98
NOV 13,82	NOV 12,82		726.0	16.5	4.55	4.32	0.0722	1.60		0.26
NOV 21,82	NOV 20,82		191.0	******	4.10	3.99	0.1082	3.85		0.47
NOV 22,82	NOV 21,82		90.0	******	******	4.00	0.1084	3.10		0.40
NOV 23,82	NOV 22,82	U	9.0	******	******	******	******	******		******
NOV 24,82	NOV 23,82		863.0	37.0	4.19	4.10	0.1110	3.05		0.64
NOV 27,82	NOV 26,82		186.0	******	4.17	4.09	0.1160	2.95		0.74
NOV 29,82	NOV 28,82		483.0	33.5	4.23	4.10	0.1024	2.15		0.55
NOV 30,82	NOV 29,82		192.0	******	4.24	4.11	0.0906	2.20		0.44
DEC 1,82	NOV 30,82		19.0	******	******	3.54	0.2880	******		******
DEC 3,82	DEC 2,82		220.0	******	******	4.05	0.1112	2.80		0.47
DEC 4,82	DEC 3,82		230.0	******	4.10	4.07	0.0918	1.95		0.57
DEC 5,82	DEC 4,82		69.0	******	******	4.33	0.0602	1.70		0.18
DEC 6,82	DEC 5,82		298.0	15.0	4.52	4.49	0.0518	1.35		0.22
DEC 7,82	DEC 6,82		29.0	******	******	4.05	0.1022	3.45		0.78
DEC 16,82	DEC 15,82		879.0	23.3	4.05	4.34	0.0758	1.40		0.43
DEC 17,82	DEC 16,82		354.0	******	4.18	4.07	0.0964	2.55		0.69
DEC 25,82	DEC 24,82		385.0	43.0	4.08	4.02	0.1228	3.45		0.60

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 2,82	SEP 1,82	0.05	0.08	0.020	0.050	0.020	0.302	0.0891
SEP 7,82	SEP 6,82	0.11	0.11	0.020	0.020	0.020	0.490	0.1122
SEP 15,82	SEP 14,82	0.28	0.37	0.040	0.035	0.050	0.690	0.3090
SEP 19,82	SEP 18,82	0.05	0.08	<W 0.005	<W 0.005	0.010	0.930	0.0646
SEP 21,82	SEP 20,82	0.71	0.40	0.125	0.080	0.070	0.860	0.2291
SEP 23,82	SEP 22,82	0.06	0.08	0.010	0.020	0.025	******	0.0501
SEP 24,82	SEP 23,82	******	0.16	******	******	******	0.800	0.0794
SEP 27,82	SEP 26,82	<T 0.01	0.12	0.005	<W 0.005	0.015	0.234	0.0072
SEP 28,82	SEP 27,82	0.04	0.08	0.005	<W 0.005	<T 0.010	0.530	0.0589
OCT 2,82	OCT 1,82	0.50	0.32	0.070	0.105	0.110	0.860	0.2291
OCT 8,82	OCT 7,82	0.05	0.11	0.010	0.030	0.030	0.410	0.0977
OCT 13,82	OCT 12,82	******	******	******	******	******	******	0.3802
OCT 14,82	OCT 13,82	0.03	0.11	0.025	0.075	0.100	0.248	0.0794
OCT 15,82	OCT 14,82	******	******	******	******	******	******	0.0288
OCT 17,82	OCT 16,82	0.03	0.04	0.020	0.020	0.020	0.040	0.0282
OCT 21,82	OCT 20,82	0.40	0.49	0.085	0.035	0.280	0.348	0.0646
NOV 1,82	OCT 31,82	0.20	0.11	0.045	0.070	0.045	0.400	0.1230
NOV 2,82	NOV 1,82	******	******	******	******	******	******	******
NOV 3,82	NOV 2,82	0.26	0.12	0.040	0.035	0.105	0.358	0.0955
NOV 4,82	NOV 3,82	0.02	<W 0.01	<W 0.005	0.010	0.020	0.082	0.0447
NOV 5,82	NOV 4,82	******	<W 0.01	******	******	******	0.008	0.0132
NOV 6,82	NOV 5,82	0.15	0.07	0.015	0.020	0.020	0.270	0.0427
NOV 12,82	NOV 11,82	0.18	0.21	0.035	0.045	0.105	0.442	0.1514
NOV 13,82	NOV 12,82	0.08	0.14	0.010	0.010	0.075	0.240	0.0479
NOV 21,82	NOV 20,82	0.08	0.09	0.020	0.030	0.170	0.232	0.1023
NOV 22,82	NOV 21,82	******	0.43	******	******	******	0.450	0.1000
NOV 23,82	NOV 22,82	******	******	******	******	******	******	******
NOV 24,82	NOV 23,82	0.15	0.11	0.005	<T 0.005	0.030	0.354	0.0794
NOV 27,82	NOV 26,82	0.31	0.35	0.035	<W 0.005	0.040	0.420	0.0813
NOV 29,82	NOV 28,82	0.05	0.10	0.005	0.015	0.010	0.120	0.0794
NOV 30,82	NOV 29,82	0.04	0.10	0.010	<W 0.005	<T 0.005	0.146	0.0776
DEC 1,82	NOV 30,82	******	******	******	******	******	******	0.2884
DEC 3,82	DEC 2,82	0.08	0.29	0.020	<T 0.010	0.140	0.082	0.0891
4,82	DEC 3,82	0.07	0.20	0.015	0.015	0.040	0.182	0.0851
,82	DEC 4,82	0.11	0.10	0.015	<T 0.010	0.030	******	0.0468
	DEC 5,82	0.04	0.18	0.015	<T 0.010	0.140	******	0.0324
	DEC 6,82	******	0.24	******	******	******	******	0.0891
	15,82	0.02	0.06	0.010	0.010	0.020	0.160	0.0457
	,82	0.14	0.15	0.030	0.025	0.035	0.310	0.0851
		0.13	0.37	0.035	0.030	0.160	0.232	0.0955

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
DEC 26,82	DEC 25,82	1000	1000	1000	1400	1	6.3	2	23359	2	1	119		
DEC 28,82	DEC 27,82	1000	900	1800	1000	1	2.6	2	23360	2	1	75		
DEC 29,82	DEC 28,82	1000	900	1000	2200	1	2.8	2	23361	2	1	149		N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11 PAGE : 8

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
DEC 26,82	DEC 25,82	483.0	16.3	4.54	4.53	0.0562	1.55	0.19
DEC 28,82	DEC 27,82	125.0	******	******	4.15	0.1000	2.10	0.76
DEC 29,82	DEC 28,82	268.0	19.2	4.43	4.45	0.0618	1.90	0.29

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CHARLESTON LAKE/DAILY/AEROCHEM #11 PAGE : 9

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
DEC 26,82	DEC 25,82	0.10	0.11	0.015	0.020	0.080	0.158	0.0295
DEC 28,82	DEC 27,82	0.14	0.09	0.020	0.025	0.055	0.268	0.0708
DEC 29,82	DEC 28,82	0.21	0.22	0.045	0.020	0.090	0.230	0.0355

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/SES #10 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 4.82	JAN 3.82	800	800	300	800	3	13.7	2	23741	2	1	96		
JAN 5.82	JAN 4.82	800	800	800	1800	1	13.9	2	23744	2	1	****	HG	
JAN 9.82	JAN 8.82	800	800	1600	2300	2	3.3	2	23747	2	1	7		N
JAN 11.82	JAN 10.82	800	800	300	730	2	6.5	2	23750	2	1	13		N
JAN 14.82	JAN 13.82	800	800	1500	2100	2	2.1	2	23753	2	1	22		N
JAN 17.82	JAN 16.82	800	800	1000	2000	2	2.1	2	23755	2	1	34		N
JAN 24.82	JAN 23.82	800	800	830	1830	2	17.3	2	23758	2	1	55		J
JAN 29.82	JAN 28.82	800	800	1100	1830	2	0.5	2	23759	2	1	48		N
JAN 31.82	JAN 30.82	800	800	****	****	2	11.7	2	23762	2	1	41		N
FEB 1.82	JAN 31.82	800	800	1400	600	2	23.1	2	23765	2	1	43		N
FEB 4.82	FEB 3.82	800	800	1530	2200	3	9.3	2	23768	2	1	73		
FEB 8.82	FEB 5.82	800	800	****	****	2	5.3	2	23771	2	1	37		NZ
FEB 10.82	FEB 9.82	800	800	****	****	2	1.5	2	23774	2	1	90		
FEB 19.82	FEB 18.82	800	800	200	800	2	5.7	2	23776	2	1	62		
MAR 2.82	MAR 1.82	800	800	****	****	2	0.5	2	23779	2	1	41		N
MAR 5.82	MAR 4.82	800	800	1600	2400	3	12.1	2	23782	2	1	76		
MAR 9.82	MAR 5.82	800	800	****	****	2	2.1	2	23785	2	1	65		Z
MAR 10.82	MAR 9.82	800	800	800	1400	2	2.9	2	23788	2	1	****	GH	N
MAR 11.82	MAR 10.82	800	800	2200	2400	2	0.6	2	23791	2	1	129		N
MAR 14.82	MAR 13.82	800	800	****	****	1	10.2	2	23794	2	1	****	G	
MAR 17.82	MAR 16.82	800	800	1900	800	1	13.9	2	23797	2	1	74		
MAR 18.82	MAR 17.82	800	800	800	1000	2	1.3	2	23800	2	1	96		
MAR 19.82	MAR 18.82	800	800	1700	2100	2	2.7	2	23803	2	1	115		
MAR 22.82	MAR 21.82	800	800	****	****	2	11.3	2	23806	2	1	****	GH	
MAR 26.82	MAR 25.82	800	800	1800	800	1	19.3	2	23818	2	1	103	CD	
MAR 31.82	MAR 30.82	800	800	****	****	1	4.3	2	23809	2	1	118		
APR 1.82	MAR 31.82	800	800	1700	2000	1	****	*	23812	2	1	****		
APR 5.82	APR 3.82	800	800	****	****	3	25.1	2	23815	2	1	89		HZ
APR 12.82	APR 10.82	800	800	****	****	3	4.3	2	23821	2	1	63		Z
APR 13.82	APR 12.82	800	800	400	800	1	0.5	2	23824	2	1	234		N
APR 14.82	APR 13.82	800	800	800	1400	1	4.1	2	23827	2	1	****	GE	
APR 21.82	APR 20.82	800	800	830	2400	1	17.1	2	23832	2	1	104		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/SES #10

REMOVAL DATE	EXPOSURE DATE		VOLUME ML		CONDUCT. UMHO/CM		PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
JAN 4,82	JAN 3,82		2166.0		13.0		4.56		4.53		0.0624		1.05		0.19
JAN 5,82	JAN 4,82		1887.0		23.4		4.25		4.24		0.0950		1.80		0.30
JAN 9,82	JAN 8,82	U	38.0		******		******		4.55		******		0.95		0.61
JAN 11,82	JAN 10,82	U	143.0		******		******	U	6.45		******		1.50		0.55
JAN 14,82	JAN 13,82	U	78.0		******		******		4.39		******		0.90		0.45
JAN 17,82	JAN 16,82	U	118.0		******		******		3.99		******		5.15		1.30
JAN 24,82	JAN 23,82		1581.0		12.8		4.80		4.64		0.0594		1.10		0.24
JAN 29,82	JAN 28,82	U	40.0		******		******	U	3.75		******	U	10.00	U	2.00
JAN 31,82	JAN 30,82	U	800.0		19.5		4.38		4.32		0.0760		0.90		0.39
FEB 1,82	JAN 31,82	U	1647.0		23.3		4.28		4.24		0.0838		1.10		0.44
FEB 4,82	FEB 3,82		1125.0		23.5		4.29		4.29		0.0834		1.50		0.36
FEB 8,82	FEB 5,82	U	323.0		50.1		******		3.91		0.1420		1.90		1.32
FEB 10,82	FEB 9,82		223.0		39.8		******		4.00		******		0.90		1.25
FEB 19,82	FEB 18,82		585.0		33.5		******		4.27		0.0870		2.90		1.10
MAR 2,82	MAR 1,82	U	34.0		******		******	U	4.29		******	U	50.40	U	15.70
MAR 5,82	MAR 4,82		1513.0		58.0		******		3.92		0.1636		3.95		1.21
MAR 9,82	MAR 5,82		227.0		54.0		******		3.98		******		3.20		1.40
MAR 10,82	MAR 9,82	U	214.0		49.0		******		3.96		******		1.95		1.14
MAR 11,82	MAR 10,82		127.0		155.0		******		3.46		******		8.15		3.80
MAR 14,82	MAR 13,82		1966.0		63.0		******		3.89		******		5.60		0.78
MAR 17,82	MAR 16,82		1690.0		17.4		******		4.50		0.0750		1.20		0.48
MAR 18,82	MAR 17,82		206.0		20.7		******		4.30		******		1.30		0.34
MAR 19,82	MAR 18,82		511.0		99.8		******		3.65		0.2910		5.90		1.73
MAR 22,82	MAR 21,82		1595.0		70.2		******		3.89		0.1870		5.50		1.25
MAR 26,82	MAR 25,82		3285.0		86.0		******		3.87		0.1994		7.25		1.99
MAR 31,82	MAR 30,82		836.0		37.5		******		4.51		0.0670		5.65		0.93
APR 1,82	MAR 31,82		927.0		19.1		******		4.75		0.0458		2.50		0.57
APR 5,82	APR 3,82		3670.0		11.4		******		4.94		0.0352		1.30		0.10
APR 12,82	APR 10,82		451.0		70.8		******		3.95		0.1628		6.20		1.32
APR 13,82	APR 12,82		192.0	U	110.0		******		3.88		0.2102	>	10.00	>	2.00
APR 14,82	APR 13,82		******		******		******		******		******		******		******
APR 21,82	APR 20,82		2922.0		41.3		******		4.18		0.1076		4.00		0.79

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HAILTON/DAILY/SES #10 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 4,82	JAN 3,82	0.08	0.07	0.010	<T 0.010	0.030	0.146	0.0295
JAN 5,82	JAN 4,82	0.12	0.14	0.015	0.010	0.040	0.154	0.0575
JAN 9,82	JAN 8,82	******	0.34	******	******	******	******	0.0282
JAN 11,82	JAN 10,82	******	U 1.24	******	******	******	<T 0.002	U 0.0004
JAN 14,82	JAN 13,82	******	0.58	******	******	******	0.080	0.0407
JAN 17,82	JAN 16,82	0.72	0.84	0.095	0.070	0.610	0.680	0.1023
JAN 24,82	JAN 23,82	0.18	0.10	0.030	0.020	0.070	0.120	0.0229
JAN 29,82	JAN 28,82	******	U 1.50	******	******	******	******	U 0.1778
JAN 31,82	JAN 30,82	0.12	0.24	0.010	0.010	0.120	0.082	0.0479
FEB 1,82	JAN 31,82	0.07	0.07	<T 0.005	0.010	0.020	0.048	0.0575
FEB 4,82	FEB 3,82	0.07	0.10	<T 0.005	0.020	0.080	0.146	0.0513
FEB 8,82	FEB 5,82	0.42	0.53	0.030	0.050	0.330	0.194	0.1230
FEB 10,82	FEB 9,82	0.41	0.55	0.065	0.015	U 0.260	0.026	0.1000
FEB 19,82	FEB 18,82	1.23	0.39	0.130	0.040	0.440	0.420	0.0537
MAR 2,82	MAR 1,82	******	U 11.90	******	******	******	******	U 0.0513
MAR 5,82	MAR 4,82	0.47	0.31	0.040	0.045	0.115	0.470	0.1202
MAR 9,82	MAR 5,82	0.89	0.53	0.095	0.400	0.320	0.330	0.1047
MAR 10,82	MAR 9,82	0.16	0.36	U 0.200	0.015	0.080	0.292	0.1096
MAR 11,82	MAR 10,82	0.75	0.86	0.110	0.080	0.440	1.160	0.3467
MAR 14,82	MAR 13,82	0.23	0.39	0.055	0.040	0.240	0.460	0.1288
MAR 17,82	MAR 16,82	0.50	0.05	0.045	0.015	0.040	0.158	0.0316
MAR 18,82	MAR 17,82	0.19	0.06	0.020	0.020	0.040	0.074	0.0501
MAR 19,82	MAR 18,82	0.41	0.26	0.040	0.035	0.035	0.268	0.2239
MAR 22,82	MAR 21,82	0.42	0.14	0.055	0.040	0.045	0.720	0.1318
MAR 26,82	MAR 25,82	0.52	0.36	0.070	0.045	0.100	1.740	0.1349
MAR 31,82	MAR 30,82	U 2.09	0.57	U 0.220	0.045	0.345	0.332	0.0309
APR 1,82	MAR 31,82	0.75	0.16	0.080	0.030	0.040	0.510	0.0178
APR 5,82	APR 3,82	0.52	0.05	0.035	0.030	0.025	0.122	0.0115
APR 12,82	APR 10,82	0.51	0.24	0.060	0.045	0.055	0.830	0.1122
APR 13,82	APR 12,82	U 2.95	0.80	U 0.335	0.210	0.230	U 1.510	0.1318
APR 14,82	APR 13,82	******	******	******	******	******	******	******
APR 21,82	APR 20,82	0.54	0.22	0.075	0.045	0.050	0.450	0.0661

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAY 3,82	MAY 2,82	800	800	1400	1600	1	2.3	1	23828	2	1	88		
MAY 8,82	MAY 7,82	800	800	****	****	1	11.6	1	23834	2	1	103	A	
MAY 9,82	MAY 8,82	800	800	800	1700	1	****	*	23836	2	1	****		
MAY 20,82	MAY 19,82	800	800	1100	2000	1	3.8	1	23845	2	1	88		T
MAY 21,82	MAY 20,82	800	800	****	****	1	4.2	1	23846	2	1	102		H
MAY 23,82	MAY 22,82	800	800	****	****	1	1.8	1	23847	2	1	62		T
MAY 24,82	MAY 23,82	800	800	1100	700	1	16.2	1	23848	2	1	99		
MAY 29,82	MAY 28,82	800	800	900	2000	1	48.0	1	23849	2	1	102	A	
MAY 31,82	MAY 30,82	800	800	2000	2400	1	4.0	1	23850	2	1	94		
JUN 1,82	MAY 31,82	800	800	900	1200	1	16.4	1	23851	2	1	100		
JUN 2,82	JUN 1,82	800	800	1400	1800	1	21.8	1	23844	2	1	101		T
JUN 7,82	JUN 5,82	800	800	****	****	1	25.6	1	23859	2	1	****	BG	Z
JUN 11,82	JUN 10,82	800	800	2300	200	1	2.4	1	23860	2	1	121		NT
JUN 14,82	JUN 13,82	800	800	2000	200	1	3.2	1	23861	2	1	118		T
JUN 16,82	JUN 15,82	800	800	1600	2400	1	8.2	1	23862	2	1	108		T
JUN 22,82	JUN 21,82	800	800	****	****	1	22.4	1	23863	2	1	106		
JUN 23,82	JUN 22,82	800	800	1710	1730	1	3.6	1	23864	2	1	123		N
JUN 24,82	JUN 23,82	800	800	1400	2100	1	7.0	1	23865	2	1	105		JC
JUL 19,82	JUL 18,82	800	800	2300	100	1	2.0	1	23866	2	1	69		
JUL 28,82	JUL 27,82	800	800	330	800	1	8.2	1	23867	2	1	98		
JUL 29,82	JUL 28,82	800	800	****	****	1	7.2	1	23868	2	1	91		
JUL 31,82	JUL 30,82	800	800	2100	300	1	13.8	1	23869	2	1	103		
AUG 3,82	AUG 2,82	800	800	1300	1630	1	3.0	1	23870	2	1	94		JH
AUG 20,82	AUG 19,82	800	800	2000	100	1	16.4	1	23871	2	1	101		
AUG 23,82	AUG 22,82	800	800	1730	300	1	10.6	1	23872	2	1	68		
AUG 25,82	AUG 24,82	800	800	300	800	1	11.0	1	23873	2	1	101		
AUG 26,82	AUG 25,82	800	800	800	1300	1	30.6	1	23874	2	1	89		
AUG 28,82	AUG 27,82	800	800	****	****	1	5.4	1	23875	2	1	97		
AUG 29,82	AUG 28,82	800	800	1100	1500	1	4.2	1	23876	2	1	87		HM
SEP 2,82	SEP 1,82	800	800	2300	200	1	15.6	1	23877	2	1	98		
SEP 15,82	SEP 14,82	800	800	1600	2100	1	5.2	1	23878	2	1	89		M
SEP 18,82	SEP 17,82	800	800	200	730	1	14.9	1	23879	2	1	48		N
SEP 21,82	SEP 20,82	800	800	2130	2300	1	10.8	1	23880	2	1	98		HM
SEP 23,82	SEP 22,82	800	800	400	600	1	4.3	1	23881	2	1	83		
SEP 27,82	SEP 26,82	800	800	200	800	1	24.6	1	23882	2	1	98		
SEP 28,82	SEP 27,82	800	800	800	2000	1	7.0	1	23883	2	1	87		
OCT 8,82	OCT 7,82	800	800	2000	2400	1	26.0	1	23886	2	1	****	G	
OCT 9,82	OCT 8,82	800	800	100	200	1	2.0	1	23885	2	1	88		
OCT 12,82	OCT 11,82	800	800	1030	1600	1	4.1	1	23884	2	1	171		N
OCT 14,82	OCT 13,82	800	800	2200	2300	1	2.1	1	23887	2	1	****	G	T

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : HAILTON/DAILY/SES #10 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 4,82	JAN 3,82	0.08	0.07	0.010	<T 0.010	0.030	0.146	0.0295
JAN 5,82	JAN 4,82	0.12	0.14	0.015	0.010	0.040	0.154	0.0575
JAN 9,82	JAN 8,82	******	0.34	******	******	******	******	0.0282
JAN 11,82	JAN 10,82	******	U 1.24	******	******	******	<T 0.002	U 0.0004
JAN 14,82	JAN 13,82	******	0.58	******	******	******	0.080	0.0407
JAN 17,82	JAN 16,82	0.72	0.84	0.095	0.070	0.610	0.680	0.1023
JAN 24,82	JAN 23,82	0.18	0.10	0.030	0.020	0.070	0.120	0.0229
JAN 29,82	JAN 28,82	******	U 1.50	******	******	******	******	U 0.1778
JAN 31,82	JAN 30,82	0.12	0.24	0.010	0.010	0.120	0.082	0.0479
FEB 1,82	JAN 31,82	0.07	0.07	<T 0.005	0.010	0.020	0.048	0.0575
FEB 4,82	FEB 3,82	0.07	0.10	<T 0.005	0.020	0.080	0.146	0.0513
FEB 8,82	FEB 5,82	0.42	0.53	0.030	0.050	0.330	0.194	0.1230
FEB 10,82	FEB 9,82	0.41	0.55	0.065	0.015	U 0.260	0.026	0.1000
FEB 19,82	FEB 18,82	1.23	0.39	0.130	0.040	0.440	0.420	0.0537
MAR 2,82	MAR 1,82	******	U 11.90	******	******	******	******	U 0.0513
MAR 5,82	MAR 4,82	0.47	0.31	0.040	0.045	0.115	0.470	0.1202
MAR 9,82	MAR 5,82	0.89	0.53	0.095	0.400	0.320	0.330	0.1047
MAR 10,82	MAR 9,82	0.16	0.36	U 0.200	0.015	0.080	0.292	0.1096
MAR 11,82	MAR 10,82	0.75	0.86	0.110	0.080	0.440	1.160	0.3467
MAR 14,82	MAR 13,82	0.23	0.39	0.055	0.040	0.240	0.460	0.1288
MAR 17,82	MAR 16,82	0.50	0.05	0.045	0.015	0.040	0.158	0.0316
MAR 18,82	MAR 17,82	0.19	0.06	0.020	0.020	0.040	0.074	0.0501
MAR 19,82	MAR 18,82	0.41	0.26	0.040	0.035	0.035	0.268	0.2239
MAR 22,82	MAR 21,82	0.42	0.14	0.055	0.040	0.045	0.720	0.1318
MAR 26,82	MAR 25,82	0.52	0.36	0.070	0.045	0.100	1.740	0.1349
MAR 31,82	MAR 30,82	U 2.09	0.57	U 0.220	0.045	0.345	0.332	0.0309
APR 1,82	MAR 31,82	0.75	0.16	0.080	0.030	0.040	0.510	0.0178
APR 5,82	APR 3,82	0.52	0.05	0.035	0.030	0.025	0.122	0.0115
APR 12,82	APR 10,82	0.51	0.24	0.060	0.045	0.055	0.830	0.1122
APR 13,82	APR 12,82	U 2.95	0.80	U 0.335	0.210	0.230	U 1.510	0.1318
APR 14,82	APR 13,82	******	******	******	******	******	******	******
APR 21,82	APR 20,82	0.54	0.22	0.075	0.045	0.050	0.450	0.0661

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/SES #10 PAGE : 2

REMOVAL DATE	EXPOSURE DATE		VOLUME ML		CONDUCT. UMHO/CM	PH FIELD		PH LAB	TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
JAN 4,82	JAN 3,82		2166.0		13.0	4.56		4.53	0.0624		1.05		0.19
JAN 5,82	JAN 4,82		1887.0		23.4	4.25		4.24	0.0850		1.80		0.30
JAN 9,82	JAN 8,82	U	38.0		******	******		4.55	******		0.95		0.61
JAN 11,82	JAN 10,82	U	143.0		******	******	U	6.45	******		1.50		0.55
JAN 14,82	JAN 13,82	U	78.0		******	******		4.39	******		0.90		0.45
JAN 17,82	JAN 16,82	U	118.0		******	******		3.99	******		5.15		1.30
JAN 24,82	JAN 23,82		1581.0		12.8	4.80		4.64	0.0594		1.10		0.24
JAN 29,82	JAN 28,82	U	40.0		******	******	U	3.75	******	U	10.00	U	2.00
JAN 31,82	JAN 30,82	U	800.0		19.5	4.38		4.32	0.0760		0.90		0.39
FEB 1,82	JAN 31,82	U	1647.0		23.3	4.28		4.24	0.0838		1.10		0.44
FEB 4,82	FEB 3,82		1125.0		23.5	4.29		4.29	0.0834		1.50		0.36
FEB 8,82	FEB 5,82	U	323.0		50.1	******		3.91	0.1420		1.90		1.32
FEB 10,82	FEB 9,82		223.0		39.8	******		4.00	******		0.90		1.25
FEB 19,82	FEB 18,82		585.0		33.5	******		4.27	0.0870		2.90		1.10
MAR 2,82	MAR 1,82	U	34.0		******	******	U	4.29	******	U	50.40	U	15.70
MAR 5,82	MAR 4,82		1513.0		58.0	******		3.92	0.1636		3.95		1.21
MAR 9,82	MAR 5,82		227.0		54.0	******		3.98	******		3.20		1.40
MAR 10,82	MAR 9,82	U	214.0		49.0	******		3.96	******		1.95		1.14
MAR 11,82	MAR 10,82		127.0		155.0	******		3.46	******		8.15		3.80
MAR 14,82	MAR 13,82		1966.0		63.0	******		3.89	******		5.60		0.78
MAR 17,82	MAR 16,82		1690.0		17.4	******		4.50	0.0750		1.20		0.48
MAR 18,82	MAR 17,82		206.0		20.7	******		4.30	******		1.30		0.34
MAR 19,82	MAR 18,82		511.0		99.8	******		3.65	0.2910		5.90		1.73
MAR 22,82	MAR 21,82		1595.0		70.2	******		3.88	0.1870		5.50		1.25
MAR 26,82	MAR 25,82		3285.0		86.0	******		3.87	0.1894		7.25		1.99
MAR 31,82	MAR 30,82		836.0		37.5	******		4.51	0.0670		5.65		0.93
APR 1,82	MAR 31,82		927.0		19.1	******		4.75	0.0458		2.50		0.57
APR 5,82	APR 3,82		3670.0		11.4	******		4.94	0.0352		1.30		0.10
APR 12,82	APR 10,82		451.0		70.8	******		3.95	0.1628		6.20		1.32
APR 13,82	APR 12,82		192.0	U	110.0	******		3.88	0.2102	>	10.00	>	2.00
APR 14,82	APR 13,82		******		******	******		******	******		******		******
APR 21,82	APR 20,82		2922.0		41.3	******		4.18	0.1076		4.00		0.79

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
OCT 15,82	OCT 14,82	800	800	1900	2200	1	3.2	1	23888	2	1	75		
NOV 2,82	NOV 1,82	800	800	1600	700	1	17.2	1	23889	2	1	93		
NOV 3,82	NOV 2,82	800	800	****	****	1	****	*	23890	2	1	****		
NOV 4,82	NOV 3,82	800	800	1400	800	1	****	*	23891	2	1	****		
NOV 5,82	NOV 4,82	800	800	800	2400	1	****	*	23892	2	1	****		
NOV 13,82	NOV 11,82	800	800	****	****	1	18.5	2	23893	2	1	88		Z
NOV 15,82	NOV 14,82	800	800	2300	200	2	****	*	23894	2	1	****		
NOV 20,82	NOV 19,82	800	800	1800	200	1	4.9	2	23896	2	1	54		
NOV 22,82	NOV 21,82	800	800	1100	1800	1	6.1	2	23898	2	1	71		M
NOV 24,82	NOV 23,82	800	800	1100	430	1	13.1	2	23900	2	1	95		
NOV 28,82	NOV 26,82	800	800	****	****	3	10.1	2	23901	2	1	74		JHZ
NOV 30,82	NOV 29,82	800	800	800	1200	1	5.6	2	23903	2	1	80		
DEC 1,82	NOV 30,82	800	800	800	1000	1	0.9	2	23904	2	1	91		T
DEC 3,82	DEC 2,82	800	800	2000	2400	1	4.5	2	23906	2	1	97		
DEC 5,82	DEC 4,82	800	800	200	500	1	8.5	2	23908	2	1	88		
DEC 6,82	DEC 5,82	800	800	1900	400	1	5.2	2	23910	2	1	101	C	H
DEC 9,82	DEC 8,82	800	800	1900	100	2	3.3	2	23913	2	1	5	E	N
DEC 10,82	DEC 9,82	800	800	200	400	2	1.1	2	23915	2	1	****	E	
DEC 16,82	DEC 15,82	800	800	1600	800	1	19.7	2	23916	2	1	101		J

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10 PAGE : 5

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
OCT 15,82	OCT 14,82		155.0	******	4.75	4.63	0.0454	1.15	0.35
NOV 2,82	NOV 1,82		1030.0	29.5	4.19	4.09	0.0916	2.60	0.45
NOV 3,82	NOV 2,82		101.0	******	******	4.29	0.0670	2.40	0.34
NOV 4,82	NOV 3,82		1254.0	18.0	4.27	4.36	0.0628	1.25	0.23
NOV 5,82	NOV 4,82		1105.0	8.7	4.70	4.72	0.0400	0.60	0.14
NOV 13,82	NOV 11,82		1054.0	26.9	4.34	4.14	0.0940	2.45	0.42
NOV 15,82	NOV 14,82		******	******	******	3.62	0.3116	******	******
NOV 20,82	NOV 19,82		170.0	******	4.04	3.94	0.1336	3.55	0.31
NOV 22,82	NOV 21,82		278.0	******	4.24	4.12	0.0864	3.30	0.75
NOV 24,82	NOV 23,82		806.0	******	4.06	3.98	0.1182	2.85	0.58
NOV 28,82	NOV 26,82		481.0	15.0	4.63	5.07	0.0496	2.35	0.52
NOV 30,82	NOV 29,82		290.0	28.0	4.29	4.11	0.1020	2.20	0.41
DEC 1,82	NOV 30,82		53.0	******	******	3.72	0.1828	3.90	1.68
DEC 3,82	DEC 2,82		281.0	30.5	4.12	4.10	0.0876	2.60	0.39
DEC 5,82	DEC 4,82		480.0	40.5	3.97	3.98	0.1110	3.10	0.69
DEC 6,82	DEC 5,82		340.0	11.7	4.65	4.68	0.0358	1.35	0.19
DEC 9,82	DEC 8,82	U	12.0	******	******	******	******	******	******
DEC 10,82	DEC 9,82		******	******	******	******	******	******	******
DEC 16,82	DEC 15,82		1282.0	27.0	4.45	4.18	0.0872	1.75	0.52

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : RAILTON/DAILY/AEROCHEM #10 PAGE : 6

REMOVAL DATE	EXPOSURE DATE		CALCIUM MG/L		CHLORIDE MG/L		MAGNESIM MG/L		POTASSIM MG/L		SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
OCT 15,82	OCT 14,82		0.17		0.09		0.030		0.035		0.020	0.306	0.0234
NOV 2,82	NOV 1,82		0.13		0.06		0.020		0.050		0.030	0.238	0.0813
NOV 3,82	NOV 2,82		******		0.09		******		******		******	0.318	0.0513
NOV 4,82	NOV 3,82		0.02		0.05	<W	0.005		0.015		0.040	0.090	0.0437
NOV 5,82	NOV 4,82		0.05		0.06	<W	0.005		0.010		0.015	0.134	0.0191
NOV 13,82	NOV 11,82		0.09		0.15		0.015		0.020		0.080	0.352	0.0724
NOV 15,82	NOV 14,82		******		******		******		******		******	******	0.2399
NOV 20,82	NOV 19,82		0.21		******		0.055		0.050		0.325	0.460	0.1148
NOV 22,82	NOV 21,82		0.05		0.09		0.010		0.020		0.050	0.282	0.0759
NOV 24,82	NOV 23,82		0.03		0.10	<W	0.005		0.010		0.030	0.332	0.1047
NOV 28,82	NOV 26,82	U	1.40		0.23		0.005		0.055		0.185	0.192	0.0085
NOV 30,82	NOV 29,82		0.04		0.10	<W	0.005	<W	0.005		0.020	0.122	0.0776
DEC 1,82	NOV 30,82		******		0.39		******		******		******	******	0.1905
DEC 3,82	DEC 2,82		0.21		0.25		0.025	<T	0.010		0.105	0.112	0.0794
DEC 5,82	DEC 4,82		0.15		0.29		0.035		0.020		0.135	0.308	0.1047
DEC 6,82	DEC 5,82		0.29		0.19		0.105		0.015		0.120	0.154	0.0209
DEC 9,82	DEC 8,82		******		******		******		******		******	******	******
DEC 10,82	DEC 9,82		******		******		******		******		******	******	******
DEC 16,82	DEC 15,82		0.04		0.07		0.015		0.040		0.065	0.242	0.0661

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/SES #12 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 4,82	JAN 3,82	800	800	550	615	1	13.9	2	22609	2	1	54		HM
JAN 5,82	JAN 4,82	800	800	****	****	1	22.3	2	22610	2	1	****	GH	NJH
JAN 7,82	JAN 6,82	800	800	1640	1645	1	0.3	2	22611	2	1	85		
JAN 9,82	JAN 8,82	800	800	1945	2005	2	3.9	2	22612	2	1	59		
JAN 11,82	JAN 10,82	800	800	650	705	2	10.3	2	22613	2	1	15		NH
JAN 14,82	JAN 13,82	800	800	1420	1500	1	2.7	2	22614	2	1	****	GH	N
JAN 17,82	JAN 16,82	800	800	1000	1140	2	2.3	2	22615	2	1	28		N
JAN 20,82	JAN 19,82	800	800	2305	2320	2	1.3	2	22616	2	1	61		
JAN 23,82	JAN 22,82	800	800	540	555	2	2.1	2	22617	2	1	64		H
JAN 24,82	JAN 23,82	800	800	1225	1240	2	12.1	2	22618	2	1	76		
JAN 29,82	JAN 28,82	630	630	1925	1930	3	0.2	2	22619	2	1	3	E	N
JAN 31,82	JAN 30,82	800	800	****	****	3	6.7	2	22620	2	1	****	GH	H
FEB 1,82	JAN 31,82	800	800	2040	2050	2	20.1	2	22621	2	1	68		J
FEB 2,82	FEB 1,82	700	700	810	815	2	2.7	2	22622	2	1	55		
FEB 3,82	FEB 2,82	700	700	****	****	2	1.1	2	22623	2	1	88		
FEB 4,82	FEB 3,82	700	700	1600	1605	3	13.1	2	22624	2	1	84		
FEB 6,82	FEB 5,82	700	700	1935	2000	2	6.3	2	22630	2	1	38	Q	N
FEB 9,82	FEB 8,82	700	700	525	535	2	3.3	2	22625	2	1	71		
FEB 19,82	FEB 18,82	800	800	20	25	2	4.1	2	22626	2	1	64		
FEB 20,82	FEB 19,82	800	800	1505	1510	3	1.7	2	22627	2	1	70		
FEB 28,82	FEB 27,82	800	800	1800	1810	2	1.3	2	22628	2	1	83		
MAR 2,82	MAR 1,82	800	800	1905	1910	2	2.1	2	22629	2	1	45		N
MAR 5,82	MAR 4,82	800	800	1430	1440	3	9.5	2	22631	2	1	93	Q	
MAR 7,82	MAR 6,82	800	800	620	625	2	****	2	22632	2	1	****	Q	
MAR 8,82	MAR 7,82	800	800	820	828	2	0.7	2	22633	2	1	60	Q	
MAR 10,82	MAR 9,82	800	800	1550	1558	2	4.1	2	22634	2	1	58	Q	
MAR 12,82	MAR 11,82	800	800	1605	1615	1	5.7	2	22635	2	1	98		
MAR 14,82	MAR 13,82	800	800	930	940	1	10.7	2	22636	2	1	99		
MAR 17,82	MAR 16,82	800	800	2010	2020	2	8.1	2	22637	2	1	90		
MAR 19,82	MAR 18,82	800	800	55	110	2	7.1	2	22638	2	1	114		
MAR 22,82	MAR 21,82	800	800	1510	1520	3	9.9	2	22639	2	1	96		
MAR 26,82	MAR 25,82	800	800	1900	1915	3	14.2	2	22640	2	1	92		HM
MAR 31,82	MAR 30,82	700	700	510	515	1	4.3	2	22641	2	1	115		H
APR 1,82	MAR 31,82	700	700	1910	1930	1	17.1	2	22642	2	1	84		
APR 4,82	APR 3,82	700	700	1200	1230	3	17.3	2	22643	2	1	110		
APR 5,82	APR 4,82	700	700	1405	1410	2	2.1	2	22644	2	1	27	C	N
APR 11,82	APR 10,82	800	800	540	545	2	0.2	2	22645	2	1	****	E	
APR 12,82	APR 11,82	700	700	1515	1525	2	1.3	2	22646	2	1	90	C	
APR 14,82	APR 13,82	700	700	1610	1615	1	3.7	2	22647	2	1	139	C	N
APR 18,82	APR 17,82	700	700	1150	1200	1	4.3	2	23278	2	1	150	A	NH

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/SES #12

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
JAN 4,82	JAN 3,82	1246.0	8.4	U 5.82	U 6.06	0.0558	0.60	0.06
JAN 5,82	JAN 4,82	U 1323.0	U 7.0	4.96	U 5.49	0.0620	0.80	0.11
JAN 7,82	JAN 6,82	42.0	******	******	U 4.18	******	9.90	U 3.77
JAN 9,82	JAN 8,82	382.0	20.9	4.40	4.41	0.0752	0.60	0.68
JAN 11,82	JAN 10,82	U 260.0	9.0	******	U 6.05	0.0438	0.90	0.28
JAN 14,82	JAN 13,82	U 122.0	******	******	U 4.73	******	U 1.95	0.54
JAN 17,82	JAN 16,82	U 109.0	******	******	4.16	******	3.25	0.96
JAN 20,82	JAN 19,82	131.0	******	******	4.06	******	2.35	1.58
JAN 23,82	JAN 22,82	222.0	13.9	******	5.17	0.0472	1.20	0.41
JAN 24,82	JAN 23,82	1514.0	15.3	4.43	4.58	0.0612	1.40	0.27
JAN 29,82	JAN 28,82	U 1.0	******	******	******	******	******	******
JAN 31,82	JAN 30,82	632.0	9.4	******	U 5.97	0.0476	1.00	0.28
FEB 1,82	JAN 31,82	2255.0	16.4	U 3.96	4.38	0.0662	0.85	0.28
FEB 2,82	FEB 1,82	246.0	37.5	******	4.01	0.1200	1.20	0.97
FEB 3,82	FEB 2,82	159.0	******	******	4.08	******	2.65	1.10
FEB 4,82	FEB 3,82	1824.0	17.1	******	4.38	0.0676	1.30	0.25
FEB 6,82	FEB 5,82	U 398.0	47.4	******	3.97	0.1384	1.25	1.29
FEB 9,82	FEB 8,82	389.0	45.0	3.94	3.94	0.1372	1.20	1.30
FEB 19,82	FEB 18,82	431.0	28.8	******	4.56	0.0782	2.90	1.15
FEB 20,82	FEB 19,82	197.0	******	******	3.57	******	9.30	1.79
FEB 28,82	FEB 27,82	177.0	******	******	4.24	******	5.70	1.80
MAR 2,82	MAR 1,82	U 156.0	******	******	U 3.97	******	U 11.10	U 3.72
MAR 5,82	MAR 4,82	1457.0	35.6	******	U 4.20	0.1118	2.70	0.88
MAR 7,82	MAR 6,82	333.0	39.4	******	4.12	0.1228	2.05	1.08
MAR 8,82	MAR 7,82	70.0	******	******	3.91	******	1.95	1.26
MAR 10,82	MAR 9,82	395.0	34.5	******	4.17	0.1168	1.20	1.09
MAR 12,82	MAR 11,82	917.0	67.5	******	3.82	U 0.1950	4.20	U 1.40
MAR 14,82	MAR 13,82	1750.0	36.5	******	4.15	0.1184	3.50	0.46
MAR 17,82	MAR 16,82	1207.0	21.1	******	4.54	0.0750	2.20	0.49
MAR 19,82	MAR 18,82	1332.0	50.4	******	4.00	0.1410	3.75	1.06
MAR 22,82	MAR 21,82	1563.0	60.2	******	4.01	0.1480	6.55	1.09
MAR 26,82	MAR 25,82	2150.0	U 11.0	******	U 4.99	U 0.0344	U 1.00	U 0.25
MAR 31,82	MAR 30,82	816.0	23.9	******	4.63	0.0546	2.90	0.79
APR 1,82	MAR 31,82	2372.0	17.9	******	4.61	0.0482	1.85	0.35
APR 4,82	APR 3,82	3148.0	15.4	******	4.75	0.0454	1.65	0.19
APR 5,82	APR 4,82	U 93.0	******	******	5.99	0.0214	1.20	0.21
APR 11,82	APR 10,82	******	******	******	******	******	******	******
APR 12,82	APR 11,82	193.0	109.0	******	3.72	0.2532	9.40	1.85
APR 14,82	APR 13,82	846.0	******	******	******	******	******	******
APR 18,82	APR 17,82	1062.0	31.1	******	U 5.08	U 0.0546	5.45	0.86

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/SES #12 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 4,82	JAN 3,82	U 0.26	U 0.54	U 0.065	U 0.230	U 0.370	U 0.320	U 0.0009
JAN 5,82	JAN 4,82	0.17	0.51	0.025	0.270	0.310	0.170	U 0.0032
JAN 7,82	JAN 6,82	******	U 3.80	******	******	******	******	U 0.0661
JAN 9,82	JAN 8,82	0.19	0.28	0.010	0.020	0.170	0.172	0.0389
JAN 11,82	JAN 10,82	U 0.84	0.54	U 0.135	0.060	0.320	0.064	U 0.0009
JAN 14,82	JAN 13,82	U 0.61	U 1.08	U 0.140	0.280	U 0.490	0.430	U 0.0186
JAN 17,82	JAN 16,82	0.51	0.60	0.075	0.130	0.450	0.450	0.0692
JAN 20,82	JAN 19,82	0.61	U 1.09	0.085	0.090	U 0.770	U 0.500	0.0871
JAN 23,82	JAN 22,82	0.24	U 0.76	0.075	0.030	U 0.570	U 0.440	0.0068
JAN 24,82	JAN 23,82	0.14	0.12	0.025	0.030	0.060	0.216	0.0263
JAN 29,82	JAN 28,82	******	******	******	******	******	******	******
JAN 31,82	JAN 30,82	U 0.89	U 0.46	U 0.175	U 0.090	0.240	0.044	U 0.0011
FEB 1,82	JAN 31,82	0.06	0.05	0.005	0.025	0.080	0.036	0.0417
FEB 2,82	FEB 1,82	0.05	0.20	<T 0.005	0.010	0.095	0.042	0.0977
FEB 3,82	FEB 2,82	0.27	U 0.63	0.035	0.070	U 0.455	0.510	0.0832
FEB 4,82	FEB 3,82	0.07	0.07	<T 0.005	0.015	0.035	0.154	0.0417
FEB 6,82	FEB 5,82	0.14	0.28	0.020	U 0.030	0.125	U 0.118	0.1072
FEB 9,82	FEB 8,82	0.26	0.51	0.035	0.015	0.255	0.070	0.1148
FEB 19,82	FEB 18,82	1.05	0.61	U 0.365	0.045	0.705	0.352	0.0275
FEB 20,82	FEB 19,82	0.10	0.63	0.035	0.040	0.425	0.690	0.2692
FEB 28,82	FEB 27,82	1.43	0.74	0.285	0.075	0.305	1.610	0.0575
MAR 2,82	MAR 1,82	U 3.27	U 1.86	******	******	U 0.845	******	U 0.1072
MAR 5,82	MAR 4,82	0.32	0.19	U 0.120	0.015	0.095	0.620	U 0.0631
MAR 7,82	MAR 6,82	0.24	0.26	0.035	0.015	0.170	0.520	0.0759
MAR 8,82	MAR 7,82	******	0.41	******	******	******	0.084	0.1230
MAR 10,82	MAR 9,82	0.14	0.52	0.035	0.015	0.180	0.490	0.0676
MAR 12,82	MAR 11,82	U 0.30	0.37	0.040	0.055	0.220	0.560	0.1514
MAR 14,82	MAR 13,82	0.26	0.26	0.045	0.015	0.135	0.410	0.0708
MAR 17,82	MAR 16,82	0.47	0.16	0.095	0.025	0.085	0.450	0.0288
MAR 19,82	MAR 18,82	0.17	0.14	0.015	0.020	0.040	0.368	0.1000
MAR 22,82	MAR 21,82	0.53	0.23	0.045	0.045	0.135	0.940	0.0977
MAR 26,82	MAR 25,82	0.08	0.34	0.025	0.025	0.135	U 0.252	U 0.0102
MAR 31,82	MAR 30,82	U 0.95	0.59	U 0.175	0.045	0.300	0.282	0.0234
APR 1,82	MAR 31,82	0.26	0.15	0.030	0.015	0.050	0.400	0.0245
APR 4,82	APR 3,82	0.33	0.04	0.035	0.025	0.030	0.096	0.0179
APR 5,82	APR 4,82	0.71	0.26	0.100	0.030	0.155	******	0.0010
APR 11,82	APR 10,82	******	******	******	******	******	******	******
APR 12,82	APR 11,82	0.33	0.32	0.045	0.065	0.120	1.210	0.1905
APR 14,82	APR 13,82	******	******	******	******	******	******	******
APR 18,82	APR 17,82	U 1.30	0.46	U 0.305	0.185	0.230	1.290	U 0.0083

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/SES #12 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
APR 21.82	APR 20.82	700	700	2130	2200	1	9.1	2	23279	2	1	116		4

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/SES #12 PAGE : 5

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
APR 21.82	APR 20.82	1743.0	30.5	******	U	5.28	0.0734	5.30	0.97

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/SES #12 PAGE : 6

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
APR 21.82	APR 20.82	U 0.84	U 0.36	U 0.145	U 0.665	U 0.345	U 1.680	U 0.0052

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAY 9,82	MAY 8,82	800	800	1810	1820	1	24.6	1	22648	2	1	97		
MAY 21,82	MAY 20,82	800	700	1500	1515	1	30.2	1	22649	2	1	104		
MAY 24,82	MAY 23,82	800	700	650	700	1	6.2	1	22650	2	1	104		
MAY 29,82	MAY 28,82	700	700	1205	1215	1	16.2	1	22651	2	1	94		
MAY 31,82	MAY 30,82	700	700	2005	2015	1	17.0	1	22652	2	1	87	F	
JUN 2,82	JUN 1,82	700	700	1630	1640	1	18.0	1	22653	2	1	90	A	
JUN 5,82	JUN 4,82	700	700	1630	1635	1	****	*	22662	2	1	****	I	
JUN 7,82	JUN 6,82	700	700	840	850	1	9.3	1	22654	2	1	108		
JUN 11,82	JUN 10,82	700	700	100	105	1	2.0	1	22655	2	1	83	AD	
JUN 14,82	JUN 13,82	700	700	1810	1815	1	1.6	1	22656	2	1	****	G	
JUN 16,82	JUN 15,82	700	700	2255	2315	1	8.2	1	22657	2	1	110		
JUN 19,82	JUN 18,82	700	700	210	215	1	2.6	1	22658	2	1	108	A	
JUN 20,82	JUN 19,82	700	700	1640	1650	1	3.2	1	22659	2	1	68	C	
JUN 21,82	JUN 20,82	700	700	630	640	1	11.4	1	22660	2	1	64	ACL	
JUN 22,82	JUN 21,82	700	700	2310	2320	1	8.2	1	22661	2	1	89		
JUN 24,82	JUN 23,82	700	700	1140	1143	1	1.0	1	22663	2	1	121	C	N
JUN 25,82	JUN 24,82	700	700	1645	1655	1	3.0	1	22664	2	1	35		NJ
JUL 3,82	JUL 2,82	700	700	2115	2120	1	2.8	1	22665	2	1	48	ACD	NJ
JUL 12,82	JUL 11,82	700	700	2230	2235	1	3.1	1	22666	2	1	105	CA	
JUL 18,82	JUL 17,82	700	700	2005	2015	1	7.8	1	22667	2	1	89		T
JUL 28,82	JUL 27,82	700	700	630	645	1	8.2	1	22668	2	1	81	AH	JC
JUL 29,82	JUL 28,82	700	700	1805	1810	1	14.8	1	22669	2	1	45	H	NJC
JUL 31,82	JUL 30,82	700	700	2040	2045	1	16.8	1	22670	2	1	100		
AUG 1,82	JUL 31,82	700	700	2205	2210	1	1.6	1	22671	2	1	61	AD	
AUG 9,82	AUG 8,82	700	700	2210	2215	1	6.0	1	22672	2	1	99	A	J
AUG 21,82	AUG 20,82	700	700	2030	2035	1	6.0	1	22673	2	1	80		
AUG 23,82	AUG 22,82	700	700	2325	2350	1	6.1	1	22674	2	1	96		
AUG 25,82	AUG 24,82	700	700	550	600	1	4.6	1	22675	2	1	103		
AUG 26,82	AUG 25,82	700	700	1040	1050	1	52.0	1	22676	2	1	102		
AUG 28,82	AUG 27,82	700	700	1555	1610	1	12.2	1	22677	2	1	110		
AUG 29,82	AUG 28,82	700	700	1430	1435	1	1.8	1	22678	2	1	59		
AUG 31,82	AUG 30,82	700	700	1900	1910	1	1.8	1	22679	2	1	74		
SEP 2,82	SEP 1,82	700	700	2020	2030	1	16.0	1	22680	2	1	98		
SEP 4,82	SEP 3,82	700	700	2035	2040	1	2.1	1	22681	2	1	76		
SEP 7,82	SEP 6,82	700	700	1540	1545	1	8.0	1	22682	2	1	101	A	
SEP 15,82	SEP 14,82	700	700	1510	1520	1	4.2	1	22683	2	1	67		T
SEP 18,82	SEP 17,82	700	700	645	700	1	10.0	1	22684	2	1	104		
SEP 21,82	SEP 20,82	700	700	305	315	1	3.0	1	22685	2	1	74		
SEP 23,82	SEP 22,82	700	700	630	640	1	2.0	1	22686	2	1	119		H
SEP 24,82	SEP 23,82	700	700	815	820	1	2.0	1	22687	2	1	87		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12

REMOVAL DATE	EXPOSURE DATE		VOLUME ML		CONDUCT. UMHO/CM		PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L	
MAY 9,82	MAY 8,82		1536.0		36.3		******		4.11		0.1026		3.90		0.37	
MAY 21,82	MAY 20,82		2027.0	U	66.7		******	U	3.87	U	0.1596	U	7.50	U	0.84	
MAY 24,82	MAY 23,82		416.0		32.5		******		4.19		0.0910		3.15		0.52	
MAY 29,82	MAY 28,82		985.0		41.3		******		4.04		0.1072		4.20		0.41	
MAY 31,82	MAY 30,82		955.0		19.0		******		4.40		0.0592		1.20		0.26	
JUN 2,82	JUN 1,82		1040.0		******		******		4.04		0.1246		6.75		0.57	
JUN 5,82	JUN 4,82		******		******		******		******		******		******		******	
JUN 7,82	JUN 6,82		645.0		7.2		******		5.22		0.0220		1.05		0.08	
JUN 11,82	JUN 10,82		107.0		******		******	U	7.73		0.1316		******		******	
JUN 14,82	JUN 13,82		79.0		******		******	U	8.45		0.0000	U	10.00	U	0.25	
JUN 16,82	JUN 15,82		581.0		98.0		******		3.73		0.2090		8.70		1.14	
JUN 19,82	JUN 18,82		180.0		85.9		******	U	6.41		0.1036		17.75		2.55	
JUN 20,82	JUN 19,82		140.0		70.5		******		3.76		0.1856		5.15		0.95	
JUN 21,82	JUN 20,82		469.0		36.4		******		4.23		0.0900		3.65		0.65	
JUN 22,82	JUN 21,82		470.0		22.7		******		4.37		0.0652		2.40		0.31	
JUN 24,82	JUN 23,82		78.0		******	U	6.89	U	7.25		******		******		******	
JUN 25,82	JUN 24,82	U	68.0		******		3.37	U	7.36		******		******		******	
JUL 3,82	JUL 2,82	U	87.0		******	U	6.82	U	7.92		******		******		******	
JUL 12,82	JUL 11,82		209.0		60.0		4.12		4.08		0.1142	U	9.65		0.81	
JUL 18,82	JUL 17,82		448.0	U	127.0		3.54		3.48	U	0.3240	U	12.75		1.14	
JUL 28,82	JUL 27,82		428.0		5.1	U	5.37	U	6.31		0.0268		0.50		0.08	
JUL 29,82	JUL 28,82	U	432.0		4.9		4.86		5.51		0.0262		0.40		0.10	
JUL 31,82	JUL 30,82		1085.0		35.6		4.20		4.09		0.0950		3.30		0.50	
AUG 1,82	JUL 31,82		63.0		******		******		******		******		******		******	
AUG 9,82	AUG 8,82		382.0		34.2		4.91		4.64		0.0460		6.70		0.60	
AUG 21,82	AUG 20,82		308.0		22.6		4.46		4.63		0.0490		3.95		0.50	
AUG 23,82	AUG 22,82		379.0		37.7		4.08		4.12		0.1004		3.55		0.64	
AUG 25,82	AUG 24,82		305.0		42.1		4.28		4.19		0.1020		5.25		0.87	
AUG 26,82	AUG 25,82		3412.0		12.9		4.65		4.56		0.0512		1.30		0.08	
AUG 28,82	AUG 27,82		866.0		29.2		4.27		4.20		0.0906		3.25		0.42	
AUG 29,82	AUG 28,82		69.0		5.4		******		5.49		0.0298		0.20		0.04	
AUG 31,82	AUG 30,82		86.0		60.0		******		3.84		0.1764		6.75		0.93	
SEP 2,82	SEP 1,82		1011.0		38.0		4.00		4.09		0.1012		3.55		0.30	
SEP 4,82	SEP 3,82		103.0		******		******		4.27		0.0980		5.80		1.20	
SEP 7,82	SEP 6,82		523.0		59.0		3.82		3.94		0.1698		5.55		0.71	
SEP 15,82	SEP 14,82		182.0	U	128.0		3.53		3.44		0.3580		13.25		1.77	
SEP 18,82	SEP 17,82		668.0		23.4		4.35		4.22		0.0644		2.60		0.38	
SEP 21,82	SEP 20,82		143.0		71.0		******		3.81		0.1618		7.50		1.59	
SEP 23,82	SEP 22,82		153.0		12.1		******	U	6.04		0.0280		2.50		0.20	
SEP 24,82	SEP 23,82		112.0		27.5		******		4.44		0.0662		4.65		0.65	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAY 9,82	MAY 8,82	0.13	0.07	0.025	0.030	0.025	0.390	0.0776
MAY 21,82	MAY 20,82	0.41	0.13	U 0.125	0.060	0.055	0.760	U 0.1349
MAY 24,82	MAY 23,82	0.23	0.10	0.070	0.055	0.035	0.400	0.0646
MAY 29,82	MAY 28,82	0.08	0.09	0.010	0.035	0.035	0.460	0.0912
MAY 31,82	MAY 30,82	0.03	0.03	0.005	<T 0.015	<W 0.005	0.102	0.0398
JUN 2,82	JUN 1,82	******	0.26	******	******	******	******	0.0912
JUN 5,82	JUN 4,82	******	******	******	******	******	******	******
JUN 7,82	JUN 6,82	0.16	0.04	0.065	<T 0.010	0.035	0.142	0.0060
JUN 11,82	JUN 10,82	******	******	******	******	******	******	U 0.0000
JUN 14,82	JUN 13,82	******	U 1.50	******	******	******	******	U 0.0000
JUN 16,82	JUN 15,82	0.72	0.45	0.125	0.185	0.135	U 0.220	0.1862
JUN 19,82	JUN 18,82	******	0.94	******	******	******	******	U 0.0004
JUN 20,82	JUN 19,82	******	0.25	******	******	******	******	0.1738
JUN 21,82	JUN 20,82	0.28	0.34	0.060	0.240	0.180	0.790	0.0589
JUN 22,82	JUN 21,82	0.02	0.10	0.015	0.080	0.065	0.450	0.0427
JUN 24,82	JUN 23,82	******	******	******	******	******	******	U 0.0001
JUN 25,82	JUN 24,82	******	******	******	******	******	******	U 0.0000
JUL 3,82	JUL 2,82	******	******	******	******	******	******	U 0.0000
JUL 12,82	JUL 11,82	U 1.27	0.36	U 0.385	0.125	0.140	U 1.200	0.0832
JUL 18,82	JUL 17,82	0.66	0.50	0.150	0.090	0.145	0.830	0.3311
JUL 28,82	JUL 27,82	0.30	0.14	0.080	0.065	0.070	0.122	U 0.0005
JUL 29,82	JUL 28,82	0.05	0.08	0.020	0.040	0.025	0.160	0.0031
JUL 31,82	JUL 30,82	0.17	0.16	0.035	0.050	0.020	0.360	0.0813
AUG 1,82	JUL 31,82	******	******	******	******	******	******	******
AUG 9,82	AUG 8,82	1.79	0.30	U 0.515	0.065	0.160	0.490	0.0229
AUG 21,82	AUG 20,82	0.69	0.69	0.155	0.160	0.195	0.730	0.0234
AUG 23,82	AUG 22,82	0.29	0.22	0.055	0.065	0.100	0.376	0.0759
AUG 25,82	AUG 24,82	0.33	U 0.77	0.090	U 0.370	U 0.375	1.240	0.0646
AUG 26,82	AUG 25,82	0.03	0.07	0.020	0.045	0.020	0.150	0.0275
AUG 28,82	AUG 27,82	0.22	0.09	0.035	0.045	<T 0.010	0.450	0.0631
AUG 29,82	AUG 28,82	******	0.09	******	******	******	0.124	0.0032
AUG 31,82	AUG 30,82	******	0.23	******	******	******	0.520	0.1445
SEP 2,82	SEP 1,82	0.06	0.20	0.020	0.045	0.070	0.332	0.0813
SEP 4,82	SEP 3,82	0.75	0.34	0.090	0.180	0.140	1.540	0.0537
SEP 7,82	SEP 6,82	0.30	0.18	0.065	0.040	0.035	0.710	0.1148
SEP 15,82	SEP 14,82	0.72	0.42	0.150	U 0.165	U 0.195	0.042	0.3631
SEP 18,82	SEP 17,82	0.21	U 0.43	0.020	0.150	0.245	0.076	0.0603
SEP 21,82	SEP 20,82	0.72	0.07	0.140	0.420	U 0.695	0.058	0.1549
SEP 23,82	SEP 22,82	0.36	0.31	0.035	0.065	0.180	0.850	U 0.0009
SEP 24,82	SEP 23,82	******	0.34	******	******	******	1.470	0.0363

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
SEP 27,82	SEP 26,82	700	700	600	610	1	4.8	1	22688	2	1	80		JH
SEP 28,82	SEP 27,82	700	700	715	720	1	7.0	1	22689	2	1	102	A	J
OCT 2,82	OCT 1,82	700	700	1205	1210	1	8.0	1	22690	2	1	84		J
OCT 8,82	OCT 7,82	700	700	2030	2100	1	26.0	1	22691	2	1	****	G	J
OCT 13,82	OCT 12,82	700	700	530	600	1	2.3	1	22692	2	1	59		
OCT 14,82	OCT 13,82	700	700	15	25	1	10.2	1	22693	2	1	105		
OCT 15,82	OCT 14,82	700	700	715	720	1	1.4	1	22694	2	1	55		
OCT 16,82	OCT 15,82	700	700	1000	1003	1	1.0	1	22695	2	1	46		N
OCT 17,82	OCT 16,82	700	700	915	920	1	2.0	1	22696	2	1	88		
OCT 21,82	OCT 20,82	700	700	2020	2025	1	3.2	1	22697	2	1	90	D	
NOV 1,82	OCT 31,82	700	700	1705	2210	1	6.8	1	22698	2	1	46		NT
NOV 2,82	NOV 1,82	700	700	620	640	1	7.0	1	22699	2	1	93		C
NOV 3,82	NOV 2,82	700	700	750	815	1	2.8	1	22700	2	1	71		
NOV 4,82	NOV 3,82	700	700	1715	1755	1	27.3	1	22701	2	1	107		J
NOV 5,82	NOV 4,82	700	700	1930	1830	1	24.0	1	22702	2	1	110		HM
NOV 6,82	NOV 5,82	700	700	700	705	1	2.3	1	22703	2	1	77		
NOV 12,82	NOV 11,82	700	700	1605	1610	1	2.2	1	22704	2	1	51		
NOV 13,82	NOV 12,82	700	700	1815	1820	1	15.0	1	22705	2	1	45		N
NOV 15,82	NOV 14,82	700	700	2350	15	2	16.3	2	22706	2	1	****	E	
NOV 22,82	NOV 21,82	700	700	1610	1620	1	5.3	2	22707	2	1	76		
NOV 23,82	NOV 22,82	700	700	700	900	1	****	2	22708	2	1	****		
NOV 24,82	NOV 23,82	700	700	210	220	1	17.3	2	22709	2	1	88		
NOV 26,82	NOV 25,82	700	700	1635	1650	2	5.3	2	22710	2	1	74		
NOV 29,82	NOV 28,82	700	700	2040	2050	1	9.3	2	22711	2	1	45		N
NOV 30,82	NOV 29,82	700	700	1000	955	1	6.3	2	22712	2	1	100		
DEC 1,82	NOV 30,82	700	700	925	930	1	22.1	2	22713	2	1	105		
DEC 3,82	DEC 2,82	700	700	1010	1100	1	8.1	2	22714	2	1	94		
DEC 6,82	DEC 5,82	700	700	120	125	1	6.5	2	22715	2	1	135		NJ
DEC 16,82	DEC 15,82	700	700	600	625	1	17.1	2	22717	2	1	91		
DEC 17,82	DEC 16,82	700	700	700	730	3	4.9	2	22718	2	1	91		
DEC 20,82	DEC 19,82	700	700	2100	2135	2	4.3	2	22719	2	1	****	EF	
DEC 21,82	DEC 20,82	700	700	1900	1930	2	2.1	2	22720	2	1	****	EF	
DEC 24,82	DEC 23,82	700	700	630	650	1	3.5	2	22721	2	1	50		
DEC 25,82	DEC 24,82	700	700	2000	2100	1	4.3	2	22722	2	1	83		J
DEC 26,82	DEC 25,82	700	700	2305	2310	1	4.3	2	22723	2	1	112		H
DEC 28,82	DEC 27,82	700	700	100	110	1	2.7	2	22724	2	1	56		H
DEC 29,82	DEC 28,82	700	700	2000	2010	1	2.3	2	22725	2	1	157		N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L	
SEP 27,82	SEP 26,82		248.0	14.5	4.80	U	5.90		0.0370		2.50		0.44	
SEP 28,82	SEP 27,82		458.0	11.5	4.63		4.99		0.0454		1.40		0.44	
OCT 2,82	OCT 1,82		433.0	66.0	4.30		3.75		0.1796		6.20		0.87	
OCT 8,82	OCT 7,82		1856.0	******	4.57	U	4.09		0.0880		2.90		0.23	
OCT 13,82	OCT 12,82		87.0	******	******	U	6.39	U	0.0778		12.90	U	5.18	
OCT 14,82	OCT 13,82		692.0	31.0	4.28		4.13		0.0964		2.25		0.68	
OCT 15,82	OCT 14,82		50.0	******	******		4.60		0.0494		1.50		0.47	
OCT 16,82	OCT 15,82	U	30.0	******	******	U	5.82	U	0.0290	U	1.50	U	0.10	
OCT 17,82	OCT 16,82		114.0	******	******		4.88		0.0390		1.40		0.03	
OCT 21,82	OCT 20,82		186.0	31.0	4.35		4.25		0.0760		3.45		0.66	
NOV 1,82	OCT 31,82	U	203.0	68.0	3.82		3.79		0.1616		6.95		1.35	
NOV 2,82	NOV 1,82		421.0	U 96.0	4.22		4.21		0.0780		3.50		0.54	
NOV 3,82	NOV 2,82		129.0	******	4.39		4.54		0.0600		4.15		0.53	
NOV 4,82	NOV 3,82		1884.0	18.6	4.85		4.33		0.0682		1.50		0.24	
NOV 5,82	NOV 4,82		1705.0	6.5	******		4.79		0.0328		0.40		0.05	
NOV 6,82	NOV 5,82		114.0	******	******		4.42		0.0534		1.10		0.40	
NOV 12,82	NOV 11,82		73.0	******	******		3.90		0.1436		4.35		1.11	
NOV 13,82	NOV 12,82	U	435.0	******	4.34		******		******		******		******	
NOV 15,82	NOV 14,82		******	******	******		******		******		******		******	
NOV 22,82	NOV 21,82		261.0	******	4.20		4.30		0.0814		3.20		0.40	
NOV 23,82	NOV 22,82		6.0	******	******		******		******		******		******	
NOV 24,82	NOV 23,82		984.0	30.5	4.31		4.14		0.0918		2.55		0.51	
NOV 26,82	NOV 25,82		253.0	******	4.28		4.13		0.1034		2.85		0.62	
NOV 29,82	NOV 28,82	U	269.0	23.3	4.36		4.41		0.0654		2.15		0.53	
NOV 30,82	NOV 29,82		407.0	20.6	4.41		4.44		0.0694		2.15		0.37	
DEC 1,82	NOV 30,82		1491.0	******	******		3.78		0.1840		6.20		1.16	
DEC 3,82	DEC 2,82		491.0	32.5	4.05		4.09		0.0966		2.50		0.50	
DEC 6,82	DEC 5,82		566.0	14.2	4.26		4.75		0.0436		1.70		0.25	
DEC 16,82	DEC 15,82		1000.0	21.0	4.39		4.33		0.0664		1.40		0.38	
DEC 17,82	DEC 16,82		288.0	26.5	4.25		4.25		0.0774		2.10		0.54	
DEC 20,82	DEC 19,82		******	******	******		******		******		******		******	
DEC 21,82	DEC 20,82		******	******	******		******		******		******		******	
DEC 24,82	DEC 23,82		113.0	******	******		4.35		0.0784		5.05		0.85	
DEC 25,82	DEC 24,82		229.0	22.0	3.82		4.36		0.0664		2.00		0.32	
DEC 26,82	DEC 25,82		309.0	13.2	5.03		5.04		0.0398		2.00		0.24	
DEC 28,82	DEC 27,82		98.0	******	******		4.88		0.0426		2.10		0.60	
DEC 29,82	DEC 28,82		232.0	10.1	4.70		4.85		0.0362		1.05		0.16	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GRAHAM LAKE/DAILY/AEROCHEM #12

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 27,82	SEP 26,82	0.17	0.34	0.040	0.055	0.110	U 1.520	U 0.0013
SEP 28,82	SEP 27,82	0.13	0.24	0.010	0.055	0.100	0.680	0.0102
OCT 2,82	OCT 1,82	0.27	0.25	0.040	0.085	0.075	0.700	0.1778
OCT 8,82	OCT 7,82	0.07	0.09	0.020	0.040	0.035	******	0.0813
OCT 13,82	OCT 12,82	******	U 1.16	******	******	******	******	U 0.0004
OCT 14,82	OCT 13,82	0.05	0.14	0.035	0.070	0.120	0.368	0.0741
OCT 15,82	OCT 14,82	******	0.19	******	******	******	******	0.0251
OCT 16,82	OCT 15,82	******	******	******	******	******	******	U 0.0015
OCT 17,82	OCT 16,82	0.06	0.16	0.025	0.070	0.120	0.198	0.0132
OCT 21,82	OCT 20,82	0.62	0.77	0.145	0.150	0.540	0.400	0.0562
NOV 1,82	OCT 31,82	0.87	0.24	0.210	0.110	0.155	0.710	0.1622
NOV 2,82	NOV 1,82	0.25	0.13	0.040	0.060	0.055	U 0.610	0.0617
NOV 3,82	NOV 2,82	******	0.19	******	******	******	0.960	0.0288
NOV 4,82	NOV 3,82	0.02	0.06	<W 0.005	0.015	0.035	0.136	0.0468
NOV 5,82	NOV 4,82	0.04	<T 0.01	<W 0.005	0.015	0.025	0.036	0.0162
NOV 6,82	NOV 5,82	******	0.08	******	******	******	0.262	0.0380
NOV 12,82	NOV 11,82	0.46	0.31	0.075	0.120	0.215	******	0.1259
NOV 13,82	NOV 12,82	******	******	******	******	******	******	******
NOV 15,82	NOV 14,82	******	******	******	******	******	******	******
NOV 22,82	NOV 21,82	0.50	0.51	0.075	0.175	0.330	0.380	0.0501
NOV 23,82	NOV 22,82	******	******	******	******	******	******	******
NOV 24,82	NOV 23,82	0.02	0.13	<W 0.005	<W 0.005	0.040	0.338	0.0724
NOV 26,82	NOV 25,82	0.18	0.32	0.030	0.020	0.075	0.590	0.0741
NOV 29,82	NOV 28,82	0.13	0.34	0.010	0.145	0.190	0.550	0.0389
NOV 30,82	NOV 29,82	0.16	0.23	0.005	U 0.105	U 0.135	0.400	0.0363
DEC 1,82	NOV 30,82	1.46	0.61	0.250	0.320	0.430	******	0.1660
DEC 3,82	DEC 2,82	0.11	0.32	0.030	0.030	0.150	******	0.0813
DEC 6,82	DEC 5,82	0.08	0.18	0.020	0.065	0.140	0.500	0.0178
DEC 16,82	DEC 15,82	0.04	0.08	0.020	0.020	0.035	0.198	0.0468
DEC 17,82	DEC 16,82	0.08	0.19	0.020	0.065	0.100	0.420	0.0562
DEC 20,82	DEC 19,82	******	******	******	******	******	******	******
DEC 21,82	DEC 20,82	******	******	******	******	******	******	******
DEC 24,82	DEC 23,82	0.41	0.88	0.075	0.345	0.570	1.440	0.0447
DEC 25,82	DEC 24,82	0.13	0.58	0.040	0.185	0.330	0.254	0.0437
DEC 26,82	DEC 25,82	0.23	0.67	0.040	0.370	0.470	0.470	0.0091
DEC 28,82	DEC 27,82	0.30	0.61	0.070	0.600	0.610	0.580	0.0132
DEC 29,82	DEC 28,82	0.12	0.28	0.035	0.055	0.275	0.158	0.0141

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/SES #09 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 4.82	JAN 3.82	800	800	500	900	2	****	*	22076	2	1	****		
JAN 5.82	JAN 4.82	800	800	1003	40	3	****	*	22077	2	1	****		H
JAN 11.82	JAN 10.82	800	800	1900	600	2	****	*	22078	2	1	****	C	
JAN 13.82	JAN 12.82	800	800	1130	1300	2	****	*	22079	2	1	****		H
JAN 16.82	JAN 15.82	800	800	900	1330	2	****	*	22080	2	1	****		
JAN 23.82	JAN 22.82	800	800	****	****	2	****	*	22081	2	1	****		
JAN 30.82	JAN 29.82	800	800	830	1330	2	****	*	22082	2	1	****		
JAN 31.82	JAN 30.82	800	800	800	1230	2	****	*	22083	2	1	****		
FEB 1.82	JAN 31.82	800	800	1430	300	2	****	*	22084	2	1	****		
FEB 4.82	FEB 3.82	800	800	900	1300	2	****	*	22085	2	1	****		
FEB 6.82	FEB 5.82	800	800	2200	500	2	****	*	22086	2	1	****		
FEB 19.82	FEB 18.82	800	800	2200	830	2	****	*	22087	2	1	****		H
FEB 20.82	FEB 19.82	800	800	800	1230	1	****	*	22088	2	1	****		
FEB 21.82	FEB 20.82	800	800	2100	300	2	****	*	22089	2	1	****		
MAR 2.82	MAR 1.82	800	800	1500	2200	2	****	*	22090	2	1	****		
MAR 5.82	MAR 4.82	800	800	1400	2330	3	****	*	22091	2	1	****		
MAR 7.82	MAR 6.82	800	800	2300	300	2	****	*	22092	2	1	****		
MAR 9.82	MAR 8.82	800	800	300	800	2	****	*	22093	2	1	****		
MAR 17.82	MAR 16.82	800	800	2000	800	3	****	*	22097	2	1	****		
MAR 19.82	MAR 18.82	800	800	1800	400	3	****	*	22098	2	1	****		
MAR 22.82	MAR 21.82	800	800	600	1800	3	****	*	22099	2	1	****		
MAR 26.82	MAR 25.82	800	800	900	2200	2	****	*	22100	2	1	****		
MAR 27.82	MAR 26.82	800	800	2100	700	3	****	*	22101	2	1	****		
APR 1.82	MAR 31.82	800	800	1600	1800	1	****	*	22102	2	1	****		
APR 3.82	APR 2.82	800	800	100	1900	3	****	*	22103	2	1	****		C
APR 11.82	APR 10.82	800	800	500	800	2	****	*	22104	2	1	****		
APR 13.82	APR 12.82	800	800	300	800	1	****	*	22105	2	1	****		
APR 18.82	APR 17.82	1030	1100	1030	1100	1	****	*	22107	2	1	****		
APR 21.82	APR 20.82	845	200	****	****	1	****	*	22108	2	1	****	CA	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/SES #09 PAGE : 2

REMOVAL DATE	EXPOSURE DATE	VOLUME ML		CONDUCT. UMHO/CM		PH FIELD		PH LAB	TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
JAN 4,82	JAN 3,82	441.0		23.2		4.32		4.35	0.0926		1.80		0.38
JAN 5,82	JAN 4,82	340.0		24.2		******	U	6.50	0.0548		1.90		0.82
JAN 11,82	JAN 10,82	438.0		16.5		4.43		4.36	0.0792		1.05		0.49
JAN 13,82	JAN 12,82	115.0		17.7		******	U	5.23	******		1.30		0.53
JAN 16,82	JAN 15,82	199.0		******		******		4.25	******	U	2.95		1.12
JAN 23,82	JAN 22,82	467.0		7.2		4.63		4.91	0.0504		0.55		0.15
JAN 30,82	JAN 29,82	426.0	U	30.6		******		4.40	0.0870	U	2.50	U	0.93
JAN 31,82	JAN 30,82	240.0		22.4		******		4.31	******		1.20		0.39
FEB 1,82	JAN 31,82	436.0		18.2		******		4.36	0.0788		0.80		0.33
FEB 4,82	FEB 3,82	444.0		22.7		******		4.32	0.0832		1.25		0.40
FEB 6,82	FEB 5,82	456.0		39.0		******		4.04	0.1236		0.75		1.06
FEB 19,82	FEB 18,82	453.0		62.0		******		4.12	0.1420		2.95		1.90
FEB 20,82	FEB 19,82	57.0		******		******		3.67	******		8.05		1.72
FEB 21,82	FEB 20,82	53.0		******		******		3.71	******		5.80		2.26
MAR 2,82	MAR 1,82	100.0		******		******	U	4.41	******	U	10.40	U	4.75
MAR 5,82	MAR 4,82	431.0		54.8		******		3.93	0.1918		3.70		1.09
MAR 7,82	MAR 6,82	127.0		73.8		******		3.82	******		5.15		1.68
MAR 9,82	MAR 8,82	35.0		******		******		4.22	******		1.55		1.52
MAR 17,82	MAR 16,82	1442.0		26.1		******		4.53	0.0592		2.40		0.56
MAR 19,82	MAR 18,82	343.0		91.5		******		3.79	0.2128		7.15		1.90
MAR 22,82	MAR 21,82	1326.0		66.0		******		3.94	0.1518		5.95		1.24
MAR 26,82	MAR 25,82	1435.0		68.5		******		3.98	0.1518		6.35		1.53
MAR 27,82	MAR 26,82	935.0		70.8		******		3.99	0.1506		6.40	U	1.54
APR 1,82	MAR 31,82	1435.0		22.1		******		4.97	0.0406		3.20		0.71
APR 3,82	APR 2,82	1214.0		5.5		******		5.66	0.0240		0.60		0.05
APR 11,82	APR 10,82	182.0		******		******		4.27	0.1028		10.15	>	2.00
APR 13,82	APR 12,82	422.0		69.0		******		3.99	0.1634		6.95		1.54
APR 18,82	APR 17,82	431.0		56.5		******		4.15	0.1546		7.45		1.10
APR 21,82	APR 20,82	660.0		51.0		******		4.02	0.1356		4.75		0.82

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/SES #09 PAGE : 3

REMOVAL DATE	EXPOSURE DATE		CALCIUM MG/L		CHLORIDE MG/L		MAGNESIM MG/L		POTASSIM MG/L		SODIUM MG/L		AMMONIUM AS N MG/L		FREE H+ LAB MG/L
JAN 4,82	JAN 3,82		0.18		0.22		0.010		0.020		0.090		0.152		0.0447
JAN 5,82	JAN 4,82	U	2.39		0.93	U	0.320		0.180		0.620		0.226	U	0.0003
JAN 11,82	JAN 10,82		0.28		0.23		0.010		0.030		0.100		0.080		0.0437
JAN 13,82	JAN 12,82	U	1.22	U	1.17	U	0.190		0.070		0.450		0.074	U	0.0059
JAN 16,82	JAN 15,82	U	0.76		0.91		0.100		0.320		0.510		0.590		0.0562
JAN 23,82	JAN 22,82		0.05		0.08		0.005		0.010		0.060		0.196		0.0123
JAN 30,82	JAN 29,82	U	0.85		0.73		0.080		0.080		0.480	U	0.570		0.0398
JAN 31,82	JAN 30,82		0.06		0.19	<T	0.005		0.030		0.050		0.158		0.0490
FEB 1,82	JAN 31,82		0.05		0.08	<T	0.005		0.010		0.050		0.034		0.0437
FEB 4,82	FEB 3,82		0.07	U	0.35	<T	0.005		0.020	U	0.240		0.158		0.0479
FEB 6,82	FEB 5,82		0.12		0.35		0.010		0.010		0.150		0.064		0.0912
FEB 19,82	FEB 18,82		1.12	U	3.40		0.190		0.050	U	3.700		0.410		0.0759
FEB 20,82	FEB 19,82		******		1.18		******		******		******		0.910		0.2138
FEB 21,82	FEB 20,82		******		0.77		******		******		******		******		0.1950
MAR 2,82	MAR 1,82		******	U	2.90		******		******		******	U	3.450	U	0.0389
MAR 5,82	MAR 4,82		0.35		0.40		0.035		0.045		0.220		0.520		0.1175
MAR 7,82	MAR 6,82		0.99		0.84		0.110		0.085		0.550		0.600		0.1514
MAR 9,82	MAR 8,82		******	>	1.50		******		******		******		******		0.0603
MAR 17,82	MAR 16,82		0.45		0.17		0.085		0.045		0.100		0.344		0.0295
MAR 19,82	MAR 18,82	U	0.99		0.30	U	0.120	U	0.105		0.060		0.430		0.1622
MAR 22,82	MAR 21,82		0.59		0.14		0.080		0.035		0.055		0.790		0.1148
MAR 26,82	MAR 25,82		0.50		0.28		0.070		0.030		0.120		1.410		0.1047
MAR 27,82	MAR 26,82		0.47		0.28		0.070		0.030		0.120		1.420		0.1023
APR 1,82	MAR 31,82	U	1.14	U	0.29	U	0.170		0.030		0.150		0.490		0.0107
APR 3,82	APR 2,82		0.11		0.02		0.020		0.020		0.020		0.122		0.0022
APR 11,82	APR 10,82	U	2.79		0.73	U	0.365		0.135		0.370	U	1.880		0.0537
APR 13,82	APR 12,82		0.97		0.29		0.105		0.045		0.075		1.180		0.1023
APR 18,82	APR 17,82		1.14		0.35		0.180		0.160		0.160		1.020		0.0708
APR 21,82	APR 20,82		0.36		0.19		0.060		0.050		0.030		0.700		0.0955

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAY 21,82	MAY 20,82	800	800	1000	1800	*	****	1	22109	2	1	****		
MAY 23,82	MAY 22,82	800	800	900	1800	*	****	*	22110	2	1	****		
MAY 24,82	MAY 23,82	800	800	600	1100	*	****	*	22111	2	1	****		
MAY 29,82	MAY 28,82	800	800	900	1700	*	****	*	22112	2	1	****		
MAY 31,82	MAY 30,82	800	800	1900	700	*	****	*	22113	2	1	****		
JUN 1,82	MAY 31,82	800	800	800	1500	*	****	*	22114	2	1	****		
JUN 2,82	JUN 1,82	800	800	930	1600	*	****	*	22115	2	1	****		
JUN 5,82	JUN 4,82	800	800	400	1800	*	****	*	22116	2	1	****		
JUN 6,82	JUN 5,82	800	800	700	2200	*	****	*	22117	2	1	****		
JUN 11,82	JUN 10,82	800	800	2100	300	1	9.0	1	22118	2	1	****	CJIGE	
JUN 14,82	JUN 13,82	800	800	1900	2300	1	1.0	1	22119	2	1	170	ACIJ	NT
JUN 19,82	JUN 18,82	800	800	100	500	1	1.0	1	22120	2	1	****	CIJ	T
JUN 21,82	JUN 20,82	800	800	1900	800	1	2.5	1	22121	2	1	****	JG	
JUN 22,82	JUN 21,82	800	800	800	1930	1	6.0	1	22122	2	1	108	BJ	
JUN 23,82	JUN 22,82	800	800	1530	2000	1	8.0	1	22123	2	1	****	CJG	
JUN 24,82	JUN 23,82	800	800	1030	1800	1	7.0	1	22124	2	1	109	J	HM
JUL 12,82	JUL 11,82	800	800	1430	2000	1	19.0	1	22125	2	1	94	C	
JUL 18,82	JUL 17,82	800	800	1645	1740	1	17.0	1	22126	2	1	95	C	T
JUL 28,82	JUL 27,82	800	800	230	800	1	9.0	1	22127	2	1	78	C	
JUL 29,82	JUL 28,82	800	800	800	1230	1	6.0	1	22128	2	1	102		JC
AUG 14,82	AUG 13,82	800	800	1500	1700	1	2.0	1	22129	2	1	****	G	
AUG 20,82	AUG 19,82	800	800	1430	130	1	16.4	1	22130	2	1	92		
AUG 23,82	AUG 22,82	800	800	****	****	1	7.4	1	22131	2	1	85		
AUG 25,82	AUG 24,82	800	800	2100	800	1	16.0	1	22134	2	1	100		
AUG 26,82	AUG 25,82	800	800	800	1330	1	20.0	1	22135	2	1	87		H
AUG 28,82	AUG 27,82	800	800	1230	1400	1	6.4	1	22136	2	1	84		
AUG 29,82	AUG 28,82	800	800	1500	1700	1	5.8	1	22137	2	1	81		HM
SEP 2,82	SEP 1,82	800	800	2000	400	1	11.0	1	22138	2	1	89		J
SEP 4,82	SEP 3,82	800	800	1030	1200	1	3.0	1	22140	2	1	67		
SEP 15,82	SEP 14,82	800	800	900	100	1	25.0	1	22142	2	1	35		N
SEP 18,82	SEP 17,82	800	800	2200	700	1	13.0	1	22143	2	1	88	C	HM
SEP 21,82	SEP 20,82	800	800	2100	130	1	9.7	1	22144	2	1	86	C	
SEP 24,82	SEP 23,82	800	800	600	1530	1	10.0	1	22145	2	1	59	C	
SEP 27,82	SEP 26,82	800	800	300	800	1	7.4	1	22146	2	1	94		
SEP 28,82	SEP 27,82	800	800	800	2300	1	5.0	1	22147	2	1	129	CD	N
OCT 8,82	OCT 7,82	800	800	1730	200	1	16.0	1	22149	2	1	81		
OCT 9,82	OCT 8,82	800	800	1600	500	1	9.0	1	22150	2	1	64		
OCT 12,82	OCT 11,82	800	800	1830	630	1	4.8	1	22151	2	1	78	D	
OCT 14,82	OCT 13,82	800	800	2130	400	1	2.6	1	22152	2	1	77	C	
OCT 15,82	OCT 14,82	800	800	2000	400	1	3.8	1	22153	2	1	73		J

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09 PAGE : 2

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAY 21,82	MAY 20,82	268.0	18.5	******	4.67	0.0448	2.55	0.29
MAY 23,82	MAY 22,82	368.0	38.7	******	4.05	0.1070	3.90	0.38
MAY 24,82	MAY 23,82	72.0	38.6	******	4.05	0.1010	3.95	0.38
MAY 29,82	MAY 28,82	1447.0	25.7	******	4.23	0.0736	2.15	0.29
MAY 31,82	MAY 30,82	57.0	******	******	3.45	U 0.3792	> 10.00	U 2.04
JUN 1,82	MAY 31,82	604.0	52.0	******	3.91	0.1530	5.90	0.40
JUN 2,82	JUN 1,82	366.0	70.8	******	3.83	0.2288	6.30	0.82
JUN 5,82	JUN 4,82	38.0	******	******	5.58	0.0314	1.25	0.20
JUN 6,82	JUN 5,82	426.0	11.4	******	4.86	0.0348	1.15	0.19
JUN 11,82	JUN 10,82	******	******	******	******	******	******	******
JUN 14,82	JUN 13,82	109.0	64.5	******	3.63	0.1690	5.15	1.36
JUN 19,82	JUN 18,82	******	109.0	******	3.57	0.2584	10.80	1.51
JUN 21,82	JUN 20,82	******	******	******	4.29	0.0562	******	******
JUN 22,82	JUN 21,82	417.0	9.6	******	4.86	0.0318	1.15	0.19
JUN 23,82	JUN 22,82	******	******	******	******	******	******	******
JUN 24,82	JUN 23,82	490.0	4.2	******	5.71	0.0218	0.35	0.16
JUL 12,82	JUL 11,82	1152.0	51.5	4.02	3.91	0.1376	5.20	0.50
JUL 18,82	JUL 17,82	1039.0	58.5	3.86	3.81	0.1534	6.50	0.39
JUL 28,82	JUL 27,82	453.0	8.8	4.73	4.80	0.0378	0.70	0.14
JUL 29,82	JUL 28,82	394.0	5.9	4.85	5.28	0.0278	0.40	0.09
AUG 14,82	AUG 13,82	86.0	******	******	4.65	0.0450	2.30	0.37
AUG 20,82	AUG 19,82	969.0	21.2	4.50	4.39	0.0578	2.80	0.30
AUG 23,82	AUG 22,82	406.0	41.3	4.08	4.01	0.1084	3.65	0.62
AUG 25,82	AUG 24,82	1032.0	31.9	4.16	4.12	0.1070	3.00	0.39
AUG 26,82	AUG 25,82	1119.0	8.9	4.72	4.64	0.0484	U 0.75	0.03
AUG 28,82	AUG 27,82	348.0	31.2	4.24	4.18	0.0974	3.15	0.54
AUG 29,82	AUG 28,82	304.0	2.6	5.21	5.47	0.0266	0.10	0.02
SEP 2,82	SEP 1,82	632.0	53.0	4.18	3.93	0.1428	4.95	0.49
SEP 4,82	SEP 3,82	129.0	******	******	5.45	0.0258	1.05	0.17
SEP 15,82	SEP 14,82	U 571.0	34.1	4.22	4.02	0.1026	2.80	0.40
SEP 18,82	SEP 17,82	739.0	26.0	4.34	4.17	0.0860	2.35	0.38
SEP 21,82	SEP 20,82	536.0	39.5	4.13	4.00	0.1234	3.55	0.81
SEP 24,82	SEP 23,82	381.0	14.0	4.44	4.47	0.0514	1.45	0.21
SEP 27,82	SEP 26,82	450.0	12.1	4.40	4.55	0.0474	0.90	0.22
SEP 28,82	SEP 27,82	414.0	U 84.0	U 3.60	U 3.64	U 0.2360	U 6.30	1.57
OCT 8,82	OCT 7,82	833.0	52.0	4.02	3.85	0.1508	5.30	0.79
OCT 9,82	OCT 8,82	374.0	53.0	4.01	3.84	0.1602	5.30	0.79
OCT 12,82	OCT 11,82	242.0	42.5	4.08	3.95	0.1182	3.50	0.90
OCT 14,82	OCT 13,82	129.0	******	******	3.80	0.1630	4.75	1.91
OCT 15,82	OCT 14,82	180.0	******	4.06	4.58	0.0522	1.15	0.35

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAY 21,82	MAY 20,82	0.22	0.06	0.050	0.085	0.025	0.580	0.0214
MAY 23,82	MAY 22,82	0.10	0.03	0.015	0.030	<T 0.010	0.304	0.0891
MAY 24,82	MAY 23,82	0.11	0.04	0.020	0.030	0.025	0.326	0.0891
MAY 29,82	MAY 28,82	0.03	0.04	0.005	<T 0.010	<T 0.010	0.232	0.0589
MAY 31,82	MAY 30,82	******	U 0.65	******	******	******	******	0.3548
JUN 1,82	MAY 31,82	0.10	0.07	0.015	0.060	0.030	0.560	0.1230
JUN 2,82	JUN 1,82	0.13	0.20	0.020	0.030	0.045	0.400	0.1479
JUN 5,82	JUN 4,82	******	0.07	******	******	******	******	0.0026
JUN 6,82	JUN 5,82	0.16	0.07	0.035	U 0.270	0.045	0.182	0.0138
JUN 11,82	JUN 10,82	******	******	******	******	******	******	******
JUN 14,82	JUN 13,82	******	0.24	******	******	******	0.142	0.2344
JUN 19,82	JUN 18,82	0.59	0.34	0.100	0.105	0.040	0.720	0.2692
JUN 21,82	JUN 20,82	******	******	******	******	******	******	0.0513
JUN 22,82	JUN 21,82	0.03	0.06	0.010	0.035	0.030	0.290	0.0138
JUN 23,82	JUN 22,82	******	******	******	******	******	******	******
JUN 24,82	JUN 23,82	0.02	0.10	0.010	0.065	0.070	0.156	0.0019
JUL 12,82	JUL 11,82	0.19	0.14	0.030	0.025	0.035	0.326	0.1230
JUL 18,82	JUL 17,82	0.17	0.12	0.025	0.030	0.030	0.430	0.1549
JUL 28,82	JUL 27,82	0.06	0.07	0.015	0.045	0.020	0.158	0.0158
JUL 29,82	JUL 28,82	0.06	0.07	0.020	0.040	0.030	0.112	0.0052
AUG 14,82	AUG 13,82	******	0.16	******	******	******	******	0.0224
AUG 20,82	AUG 19,82	0.28	0.28	0.050	<T 0.010	0.015	0.430	0.0407
AUG 23,82	AUG 22,82	0.29	0.13	0.035	0.020	0.015	0.298	0.0977
AUG 25,82	AUG 24,82	0.10	0.09	0.010	0.030	0.015	0.358	0.0759
AUG 26,82	AUG 25,82	0.01	<T 0.01	<W 0.005	0.005	<W 0.005	0.038	0.0229
AUG 28,82	AUG 27,82	0.21	0.13	0.030	0.075	U 0.040	0.560	0.0661
AUG 29,82	AUG 28,82	0.03	0.07	0.015	0.035	0.035	0.080	0.0034
SEP 2,82	SEP 1,82	0.11	0.19	0.035	0.080	0.065	0.460	0.1175
SEP 4,82	SEP 3,82	0.30	0.11	0.035	0.035	0.020	0.240	0.0035
SEP 15,82	SEP 14,82	0.06	0.13	<W 0.005	<W 0.005	0.015	0.346	0.0955
SEP 18,82	SEP 17,82	0.10	0.10	0.005	0.045	0.070	0.620	0.0676
SEP 21,82	SEP 20,82	0.30	0.31	0.045	0.090	0.125	0.740	0.1000
SEP 24,82	SEP 23,82	0.05	0.06	<W 0.005	<T 0.015	0.020	0.232	0.0339
SEP 27,82	SEP 26,82	0.05	0.22	<W 0.005	0.055	0.090	0.086	0.0282
SEP 28,82	SEP 27,82	0.33	0.35	U 0.070	0.055	0.080	0.460	U 0.2291
OCT 8,82	OCT 7,82	0.24	0.19	0.045	0.040	0.020	0.710	0.1413
OCT 9,82	OCT 8,82	0.15	0.18	0.040	0.035	0.020	0.710	0.1445
OCT 12,82	OCT 11,82	0.22	0.25	0.045	0.040	0.025	0.450	0.1122
OCT 14,82	OCT 13,82	U 0.66	0.28	0.125	0.060	0.025	0.104	0.1585
OCT 15,82	OCT 14,82	0.06	0.07	0.025	0.030	0.020	0.284	0.0263

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AFROCHEM #09

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
OCT 16,82	OCT 15,82	800	800	1900	700	1	1.2	1	22154	2	1	14		N
OCT 21,82	OCT 20,82	800	800	1600	300	1	5.8	1	22155	2	1	69		
OCT 22,82	OCT 21,82	800	800	1330	1900	1	1.2	1	22156	2	1	26		N
NOV 2,82	NOV 1,82	800	800	1400	800	1	12.5	2	22157	2	1	60		
NOV 3,82	NOV 2,82	800	800	800	2300	1	****	*	22158	2	1	****		T
NOV 4,82	NOV 3,82	800	800	1000	800	1	19.3	2	22159	2	1	20	C	N
NOV 5,82	NOV 4,82	800	800	900	200	1	14.9	2	22160	2	1	97	C	
NOV 12,82	NOV 11,82	800	800	1900	600	1	4.1	2	22161	2	1	135		N
NOV 13,82	NOV 12,82	800	800	1500	400	3	10.9	2	22162	2	1	89		
NOV 15,82	NOV 14,82	800	800	1900	400	2	0.7	2	22163	2	1	44		N
NOV 21,82	NOV 20,82	800	800	1900	2230	1	2.9	2	22164	2	1	****	EF	
NOV 23,82	NOV 22,82	800	800	1400	500	1	4.3	2	22165	2	1	****	EF	
NOV 27,82	NOV 26,82	800	800	1300	1900	2	1.1	2	22166	2	1	****	EF	
NOV 29,82	NOV 28,82	800	800	1700	800	3	12.9	2	22167	2	1	****	EF	
NOV 30,82	NOV 29,82	800	800	2300	500	1	0.4	2	22168	2	1	304		N
DEC 2,82	DEC 1,82	800	800	900	1230	1	0.5	2	22169	2	1	174		NT
DEC 3,82	DEC 2,82	800	800	2000	300	1	10.3	2	22170	2	1	96		
DEC 4,82	DEC 3,82	800	800	2100	300	1	9.3	2	22171	2	1	92		
DEC 6,82	DEC 5,82	800	800	2200	400	1	5.9	2	22172	2	1	77	C	
DEC 7,82	DEC 6,82	700	700	1500	1510	1	****	2	22716	2	1	****		
DEC 16,82	DEC 15,82	800	800	1400	800	1	17.6	2	22173	2	1	82		
DEC 24,82	DEC 23,82	800	800	1200	600	1	6.6	2	22174	2	1	****	EF	
DEC 25,82	DEC 24,82	800	800	1400	600	3	2.1	2	22175	2	1	****	EF	
DEC 26,82	DEC 25,82	800	800	1300	1700	1	4.9	2	22176	2	1	****	EG	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB	TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L	NITRATE AS N MG/L
OCT 16,82	OCT 15,82	U	11.0	******	******		******	******		******	******
OCT 21,82	OCT 20,82		259.0	24.5	4.33		4.31	0.0770		2.55	0.48
OCT 22,82	OCT 21,82	U	20.0	******	******	U	6.23	0.0268	U	******	******
NOV 2,82	NOV 1,82		487.0	34.5	4.07		4.05	0.0996		2.90	0.52
NOV 3,82	NOV 2,82		13.0	******	******		3.66	0.2006		******	******
NOV 4,82	NOV 3,82	U	249.0	16.5	******		4.38	0.0616		1.00	0.24
NOV 5,82	NOV 4,82		936.0	6.9	******		4.83	0.0340		0.45	0.10
NOV 12,82	NOV 11,82		358.0	26.0	******		4.20	0.0932		2.30	0.53
NOV 13,82	NOV 12,82		628.0	26.2	******		4.20	0.0826		2.30	0.53
NOV 15,82	NOV 14,82	U	20.0	******	******		4.03	0.1124		2.00	0.75
NOV 21,82	NOV 20,82		******	******	******		******	******		******	******
NOV 23,82	NOV 22,82		******	******	******		******	******		******	******
NOV 27,82	NOV 26,82		******	******	******		******	******		******	******
NOV 29,82	NOV 28,82		******	******	******		******	******		******	******
NOV 30,82	NOV 29,82		78.0	******	******		******	******		******	******
DEC 2,82	DEC 1,82		56.0	******	******		3.57	0.2640		5.45	2.85
DEC 3,82	DEC 2,82		636.0	28.0	4.15		4.16	0.0850		2.20	0.31
DEC 4,82	DEC 3,82		551.0	68.5	3.77		3.78	0.1746		4.90	1.34
DEC 6,82	DEC 5,82		294.0	21.5	4.24		4.28	0.0648		1.60	0.29
DEC 7,82	DEC 6,82		32.0	******	******		4.12	0.1028		******	******
DEC 16,82	DEC 15,82		930.0	26.3	******		4.28	0.0748		1.60	0.54
DEC 24,82	DEC 23,82		******	******	******		******	******		******	******
DEC 25,82	DEC 24,82		******	******	******		******	******		******	******
DEC 26,82	DEC 25,82		******	******	******		******	******		******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WHITMAN CREEK/DAILY/AEROCHEM #09

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
OCT 16,82	OCT 15,82	******	******	******	******	******	******	******
OCT 21,82	OCT 20,82	0.45	0.47	0.075	0.045	0.280	0.284	0.0490
OCT 22,82	OCT 21,82	******	******	******	******	******	******	U 0.0006
NOV 2,82	NOV 1,82	0.11	0.08	0.020	0.075	0.030	0.256	0.0891
NOV 3,82	NOV 2,82	******	******	******	******	******	******	0.2188
NOV 4,82	NOV 3,82	0.04	<W 0.01	<W 0.005	0.020	0.020	0.066	0.0417
NOV 5,82	NOV 4,82	0.04	<W 0.01	<W 0.005	0.010	0.025	0.066	0.0148
NOV 12,82	NOV 11,82	0.14	0.19	0.025	0.035	0.120	0.328	0.0631
NOV 13,82	NOV 12,82	0.14	0.18	0.025	0.030	0.155	0.314	0.0631
NOV 15,82	NOV 14,82	******	******	******	******	******	******	0.0933
NOV 21,82	NOV 20,82	******	******	******	******	******	******	******
NOV 23,82	NOV 22,82	******	******	******	******	******	******	******
NOV 27,82	NOV 26,82	******	******	******	******	******	******	******
NOV 29,82	NOV 28,82	******	******	******	******	******	******	******
NOV 30,82	NOV 29,82	******	******	******	******	******	******	******
DEC 2,82	DEC 1,82	******	0.48	******	******	******	******	0.2692
DEC 3,82	DEC 2,82	0.08	0.30	0.020	<T 0.005	0.160	0.044	0.0692
DEC 4,82	DEC 3,82	0.36	0.77	0.115	0.055	0.390	0.600	0.1660
DEC 6,82	DEC 5,82	0.08	0.20	0.020	0.025	0.120	0.106	0.0525
DEC 7,82	DEC 6,82	******	******	******	******	******	******	0.0759
DEC 16,82	DEC 15,82	0.04	0.13	0.010	0.050	0.060	0.230	0.0525
DEC 24,82	DEC 23,82	******	******	******	******	******	******	******
DEC 25,82	DEC 24,82	******	******	******	******	******	******	******
DEC 26,82	DEC 25,82	******	******	******	******	******	******	******

PART VI

NORTHWESTERN REGION

DAILY PRECIPITATION CHEMISTRY LISTINGS

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/SES #16

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 3,82	JAN 2,82	830	830	****	****	2	****	*	38038	2	1	****		
JAN 11,82	JAN 10,82	830	830	2000	200	2	5.1	2	38041	2	1	27	D	N
JAN 23,82	JAN 22,82	830	830	1500	600	2	17.5	2	38048	2	1	27		
FEB 2,82	FEB 1,82	830	830	2200	200	2	2.3	2	38050	2	1	81	D	
FEB 23,82	FEB 22,82	830	830	100	400	4	2.9	2	38055	2	1	41	D	N
FEB 28,82	FEB 27,82	830	830	100	830	2	6.7	2	38056	2	1	****	G	N
MAR 8,82	MAR 7,82	830	830	1900	100	2	2.5	2	38057	2	1	64		
MAR 11,82	MAR 10,82	830	830	1500	1700	4	7.1	2	38058	2	1	103		
MAR 13,82	MAR 12,82	830	930	1300	830	3	8.1	2	38059	2	1	32		N
MAR 17,82	MAR 16,82	830	830	2300	100	2	0.1	2	38070	2	1	408		
MAR 18,82	MAR 17,82	830	830	2400	200	2	6.3	2	38071	2	1	85	D	M
MAR 21,82	MAR 20,82	830	830	2400	300	2	2.5	2	38072	2	1	97		M
MAR 24,82	MAR 23,82	830	830	****	****	3	1.2	2	38073	2	1	39		N
MAR 25,82	MAR 24,82	830	830	300	400	2	1.5	2	38074	2	1	26		N
MAR 30,82	MAR 29,82	830	830	2400	300	2	2.4	2	38075	2	1	2	CD	N
MAR 31,82	MAR 30,82	830	830	1000	1300	3	0.1	2	38076	2	1	****		
APR 3,82	APR 2,82	830	830	1300	1800	3	5.5	2	38077	2	1	232		
APR 4,82	APR 3,82	830	830	100	****	2	2.2	2	38078	2	1	25		HM
APR 10,82	APR 9,82	830	830	1700	2000	2	7.1	2	38079	2	1	31		H
APR 14,82	APR 13,82	830	830	1000	1200	1	2.7	2	38080	2	1	124		NY
APR 15,82	APR 14,82	830	830	600	730	1	****	*	38081	2	1	****	C	
APR 19,82	APR 18,82	830	830	1500	1800	3	2.9	2	38082	2	1	72		

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/SES #16 PAGE : 2

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L	NITRATE AS N MG/L
JAN 3,82	JAN 2,82		1162.0	9.2	******		4.65		0.0578		0.35	0.21
JAN 11,82	JAN 10,82	U	232.0	******	******		4.62		0.0582		0.55	0.28
JAN 23,82	JAN 22,82		800.0	4.6	******		4.90		0.0558		0.55	0.05
FEB 2,82	FEB 1,82		309.0	10.8	******		4.58		0.0612		0.35	0.25
FEB 23,82	FEB 22,82	U	196.0	******	******		4.70		******		1.10	0.21
FEB 28,82	FEB 27,82	U	238.0	33.7	******		4.38		******		3.10	1.24
MAR 8,82	MAR 7,82		265.0	9.8	******		4.69		0.0768		0.60	0.17
MAR 11,82	MAR 10,82		1203.0	11.7	******		4.82		0.0774		1.05	0.36
MAR 13,82	MAR 12,82	U	437.0	11.7	******		4.72		0.0684		1.15	0.16
MAR 17,82	MAR 16,82		67.0	******	******		3.68		0.2170		6.80	0.87
MAR 18,82	MAR 17,82		881.0	6.0	******		4.81		0.0374		0.30	0.07
MAR 21,82	MAR 20,82		399.0	20.0	******		4.30		0.0678		1.35	0.12
MAR 24,82	MAR 23,82	U	77.0	******	******		4.42		0.0674		3.75	0.39
MAR 25,82	MAR 24,82	U	65.0	******	******		4.82		0.0388		1.00	0.08
MAR 30,82	MAR 29,82	U	10.0	******	******		******		******		******	******
MAR 31,82	MAR 30,82		******	18.4	******		4.72		0.0748		2.35	0.43
APR 3,82	APR 2,82		2097.0	12.5	******		4.87		0.0396		1.70	0.18
APR 4,82	APR 3,82		91.0	******	******		4.84		0.0358		1.85	0.41
APR 10,82	APR 9,82		368.0	22.5	******		4.48		0.0640		2.50	0.43
APR 14,82	APR 13,82		550.0	20.1	******	U	5.88	U	0.0368		4.30	0.52
APR 15,82	APR 14,82		100.0	******	******	U	6.76	U	0.0508		6.60	1.19
APR 19,82	APR 18,82		346.0	6.8	******		6.06		0.0200		0.70	0.27

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/SES #16 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L		CHLORIDE MG/L		MAGNESIM MG/L		POTASSIM MG/L		SODIUM MG/L		AMMONIUM AS N MG/L		FREE H+ LAB MG/L	
JAN 3,82	JAN 2,82	0.04	<T	0.01		0.005		0.010		0.010		0.026		0.0224	
JAN 11,82	JAN 10,82	0.13		0.09		0.025		0.070		0.060		0.018		0.0240	
JAN 23,82	JAN 22,82	0.08		0.04		0.005		0.020		0.080		0.002		0.0126	
FEB 2,82	FEB 1,82	0.04		0.09	<T	0.005	<T	0.005		0.070		0.002		0.0263	
FEB 23,82	FEB 22,82	0.11		0.10		0.010		0.005		0.035		0.252		0.0200	
FEB 28,82	FEB 27,82	0.70		0.26		0.055		0.035		0.115		1.210		0.0417	
MAR 8,82	MAR 7,82	0.18		0.09		0.035		0.020		0.035	<T	0.002		0.0204	
MAR 11,82	MAR 10,82	0.24		0.04		0.025		0.010		0.030		0.358		0.0151	
MAR 13,82	MAR 12,82	0.07		0.13		0.020		0.095		0.110		0.148		0.0191	
MAR 17,82	MAR 16,82	******		0.29		******		******		******		0.188		0.2089	
MAR 18,82	MAR 17,82	0.01	<T	0.01	<T	0.005	<T	0.005		0.005		0.012		0.0155	
MAR 21,82	MAR 20,82	0.05		0.04		0.005		0.015		0.030	<T	0.004		0.0501	
MAR 24,82	MAR 23,82	0.29		0.08		0.050		0.035		0.100		******		0.0380	
MAR 25,82	MAR 24,82	0.09		0.28		0.020		0.080	U	0.195		******		0.0151	
MAR 30,82	MAR 29,82	******		******		******		******		******		******		******	
MAR 31,82	MAR 30,82	0.56		0.03		0.060		0.045		0.040		0.510		0.0191	
APR 3,82	APR 2,82	0.36		0.08		0.075		0.030		0.050		0.256		0.0135	
APR 4,82	APR 3,82	0.37		0.09		0.075		0.035		0.050		0.240		0.0145	
APR 10,82	APR 9,82	0.04		0.02		0.025		0.400		0.045		0.740		0.0331	
APR 14,82	APR 13,82	0.70	U	0.19		0.055		0.045		0.125		1.290	U	0.0013	
APR 15,82	APR 14,82	2.00	U	0.75	U	0.190		0.715	U	0.390		******	U	0.0002	
APR 19,82	APR 18,82	0.25		0.10		0.030		0.070		0.045		0.384		0.0009	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM #16 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAY 4,82	MAY 3,82	830	830	1730	2000	1	26.3	1	38089	2	1	25		N
MAY 10,82	MAY 9,82	830	830	1700	400	1	21.8	1	38090	2	1	31		N
MAY 11,82	MAY 10,82	830	830	2400	500	1	12.0	1	32006	2	1	****	CDG	H
MAY 13,82	MAY 12,82	830	830	600	800	1	11.2	1	32007	2	1	****	CDG	HCM
MAY 17,82	MAY 16,82	830	830	2000	2230	1	6.2	1	32008	2	1	****	CDG	
MAY 18,82	MAY 17,82	830	830	1000	1100	1	12.2	1	32009	2	1	****	CDG	HCM
MAY 19,82	MAY 18,82	830	830	1000	2430	1	14.0	1	32010	2	1	97	C	C
MAY 30,82	MAY 29,82	830	830	2200	2400	1	12.8	1	32011	2	1	97	D	T
JUN 1,82	MAY 31,82	820	830	1200	1400	1	5.0	1	32012	2	1	78	CD	
JUN 7,82	JUN 6,82	830	830	500	700	1	8.0	1	32013	2	1	94	CD	H
JUN 10,82	JUN 9,82	830	830	1600	1900	1	20.0	1	32014	2	1	100	C	C
JUN 12,82	JUN 11,82	830	830	1500	2000	1	3.0	1	32015	2	1	73	CD	
JUN 14,82	JUN 13,82	830	830	600	800	1	0.2	1	32016	2	1	202		N
JUN 21,82	JUN 20,82	830	830	1500	1700	1	1.1	1	32019	2	1	59	D	
JUL 2,82	JUL 1,82	830	830	2400	300	1	3.5	1	32018	2	1	77	CD	
JUL 6,82	JUL 5,82	200	700	****	****	1	19.2	1	32020	2	1	98	CD	
JUL 7,82	JUL 6,82	830	830	1900	130	1	19.2	1	32021	2	1	36	CD	N
JUL 9,82	JUL 8,82	830	930	700	800	1	10.8	1	32022	2	1	53	CD	
JUL 10,82	JUL 9,82	830	830	1000	1200	1	4.2	1	32023	2	1	76	CD	
JUL 12,82	JUL 11,82	830	830	****	****	1	15.2	1	32024	2	1	98	CD	M
JUL 13,82	JUL 12,82	830	830	****	****	1	24.4	1	32025	2	1	121	CD	NHCM
JUL 14,82	JUL 13,82	830	830	****	****	1	6.4	1	32026	2	1	95	C	HM
JUL 16,82	JUL 15,82	830	830	****	****	1	3.4	1	32027	2	1	94		
JUL 24,82	JUL 23,82	830	830	930	1100	1	3.6	1	32028	2	1	95		
JUL 29,82	JUL 28,82	****	830	630	800	*	5.2	1	32029	2	1	101		C
JUL 30,82	JUL 29,82	830	830	1500	1700	1	5.2	1	32030	2	1	98	CD	HM
AUG 7,82	AUG 6,82	830	830	1000	1100	1	5.2	1	32031	2	1	88	C	
AUG 8,82	AUG 7,82	830	830	740	810	1	0.5	1	32032	2	1	****	E	
AUG 9,82	AUG 8,82	830	830	1300	1500	1	15.2	1	32033	2	1	76	Q	M
AUG 19,82	AUG 18,82	830	830	1300	1500	1	10.4	1	32034	2	1	84		H
AUG 22,82	AUG 21,82	830	830	930	2200	1	19.4	1	32035	2	1	89	C	HM
AUG 23,82	AUG 22,82	830	830	1530	1800	1	5.2	1	32036	2	1	50	CQ	HM
AUG 29,82	AUG 28,82	830	830	100	400	*	2.6	1	32037	2	1	106	B	H
SEP 1,82	AUG 31,82	830	830	****	****	1	0.9	1	32038	2	1	171	CD	N
SEP 2,82	SEP 1,82	830	830	2200	2400	1	8.5	1	32039	2	1	99	C	
SEP 11,82	SEP 10,82	830	830	900	2000	1	3.5	1	32040	2	1	22	C	N
SEP 12,82	SEP 11,82	830	830	100	200	1	12.8	1	32041	2	1	93		HM
SEP 13,82	SEP 12,82	830	830	2200	2400	1	18.2	1	32042	2	1	97	D	HM
SEP 14,82	SEP 13,82	830	830	****	****	1	2.0	1	32043	2	1	64		
SEP 15,82	SEP 14,82	830	830	1000	1300	1	7.2	1	32044	2	1	24	C	NHM

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM #16 PAGE : 2

REMOVAL DATE	EXPOSURE DATE		VOLUME ML		CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
MAY 4,82	MAY 3,82	U	424.0		8.3	******	5.32	0.0278		1.15		0.21
MAY 10,82	MAY 9,82	U	434.0		6.4	******	5.79	0.0294		0.85		0.20
MAY 11,82	MAY 10,82		419.0		13.4	******	6.12	0.0432		2.05		0.39
MAY 13,82	MAY 12,82		605.0		10.2	******	5.05	0.0452		1.20		0.12
MAY 17,82	MAY 16,82		333.0	U	98.0	******	3.75	0.2408	U	11.40	U	1.21
MAY 18,82	MAY 17,82		720.0		20.6	******	4.69	0.0540		2.15		0.34
MAY 19,82	MAY 18,82		875.0		6.5	******	5.14	0.0380		0.40		0.08
MAY 30,82	MAY 29,82		797.0		44.1	******	3.94	0.1144		5.80		0.21
JUN 1,82	MAY 31,82		253.0		13.7	******	4.60	0.0348		1.15		0.13
JUN 7,82	JUN 6,82		487.0		20.7	******	4.55	0.0472		3.85		0.31
JUN 10,82	JUN 9,82		1289.0		8.8	******	4.96	0.0324		0.85		0.09
JUN 12,82	JUN 11,82		142.0		9.1	******	6.04	0.0264		1.20		0.21
JUN 14,82	JUN 13,82		26.0		******	******	5.60	0.0288		******		******
JUN 21,82	JUN 20,82		42.0		******	******	5.12	0.0232		******		******
JUL 2,82	JUL 1,82		173.0		******	******	5.75	0.0236	<W	0.05	<W	0.01
JUL 6,82	JUL 5,82		1216.0		6.6	******	5.67	0.0212		0.65		0.23
JUL 7,82	JUL 6,82	U	444.0		4.5	******	5.15	0.0230		0.25		0.08
JUL 9,82	JUL 8,82		372.0		12.7	******	6.54	0.0236		1.45		0.42
JUL 10,82	JUL 9,82		207.0		4.9	******	5.14	0.0214		0.25		0.07
JUL 12,82	JUL 11,82		962.0		6.4	******	4.91	0.0290		0.20		0.06
JUL 13,82	JUL 12,82		1907.0		5.6	******	5.07	0.0264		0.20		0.05
JUL 14,82	JUL 13,82		393.0		9.5	******	4.70	0.0428		0.50		0.15
JUL 16,82	JUL 15,82		206.0		11.8	******	4.57	0.0408		0.65		0.22
JUL 24,82	JUL 23,82		220.0		5.1	******	5.33	0.0178		0.45		0.16
JUL 29,82	JUL 28,82		337.0		4.6	******	5.61	0.0188		0.35		0.11
JUL 30,82	JUL 29,82		327.0		7.2	******	4.83	0.0372		0.40		0.14
AUG 7,82	AUG 6,82		296.0		7.7	******	5.01	0.0294		0.80		0.24
AUG 8,82	AUG 7,82		******		******	******	******	******		******		******
AUG 9,82	AUG 8,82		744.0		1.8	******	5.42	0.0216	<T	0.05	<W	0.01
AUG 19,82	AUG 18,82		562.0		9.7	******	5.19	0.0502		1.70		0.26
AUG 22,82	AUG 21,82		1110.0		4.6	******	5.27	0.0314		0.50		0.12
AUG 23,82	AUG 22,82		170.0		7.6	******	4.78	0.0366		0.65		0.07
AUG 29,82	AUG 28,82		178.0		8.5	******	5.57	0.0426		1.25		0.36
SEP 1,82	AUG 31,82		99.0		******	******	5.35	0.0312		0.65		0.16
SEP 2,82	SEP 1,82		544.0		5.1	******	5.14	0.0398		0.60		0.15
SEP 11,82	SEP 10,82	U	50.0		******	******	4.17	0.0940		4.50		0.28
SEP 12,82	SEP 11,82		765.0		12.6	******	5.03	0.0472		1.95		0.37
SEP 13,82	SEP 12,82		1142.0		3.4	******	5.17	0.0324		0.20		0.02
SEP 14,82	SEP 13,82		83.0		******	******	4.72	0.0398		0.55		0.10
SEP 15,82	SEP 14,82	U	114.0		******	******	4.73	0.0390		0.45		0.11

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM #16 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAY 4,82	MAY 3,82	0.21	0.02	0.025	<T 0.010	<T 0.005	0.316	0.0048
MAY 10,82	MAY 9,82	0.14	0.03	0.030	0.025	0.015	0.348	0.0016
MAY 11,82	MAY 10,82	0.54	0.08	0.090	0.070	0.115	0.820	0.0008
MAY 13,82	MAY 12,82	0.09	0.02	0.010	0.025	0.135	0.120	0.0089
MAY 17,82	MAY 16,82	0.71	U 0.28	0.115	0.115	0.200	1.040	0.1778
MAY 18,82	MAY 17,82	0.17	0.09	0.020	0.040	0.140	0.326	0.0204
MAY 19,82	MAY 18,82	0.02	<W 0.01	0.005	0.025	<T 0.010	0.048	0.0072
MAY 30,82	MAY 29,82	0.06	0.05	0.005	0.045	0.080	0.630	0.1148
JUN 1,82	MAY 31,82	0.07	0.04	0.010	0.050	0.025	0.148	0.0251
JUN 7,82	JUN 6,82	0.27	0.04	0.030	0.055	0.025	1.030	0.0282
JUN 10,82	JUN 9,82	0.04	0.01	0.010	<T 0.005	0.015	0.108	0.0110
JUN 12,82	JUN 11,82	0.38	0.03	0.070	0.075	0.015	0.378	0.0009
JUN 14,82	JUN 13,82	******	******	******	******	******	******	0.0025
JUN 21,82	JUN 20,82	******	******	******	******	******	******	0.0076
JUL 2,82	JUL 1,82	0.02	<W 0.01	<W 0.005	0.055	<W 0.005	0.002	0.0018
JUL 6,82	JUL 5,82	0.27	0.08	0.040	0.070	0.075	0.190	0.0021
JUL 7,82	JUL 6,82	0.02	<W 0.01	<W 0.005	<T 0.010	<T 0.005	0.048	0.0071
JUL 9,82	JUL 8,82	0.73	0.08	0.150	0.075	0.030	0.640	0.0003
JUL 10,82	JUL 9,82	0.02	<T 0.01	0.005	<T 0.015	<W 0.005	0.050	0.0072
JUL 12,82	JUL 11,82	0.03	0.03	0.005	<T 0.015	<W 0.005	0.020	0.0123
JUL 13,82	JUL 12,82	0.04	<T 0.02	0.010	<T 0.015	<W 0.005	0.038	0.0085
JUL 14,82	JUL 13,82	0.13	0.07	0.040	0.030	0.015	0.078	0.0200
JUL 16,82	JUL 15,82	0.02	0.04	<W 0.005	<T 0.005	<T 0.005	0.106	0.0269
JUL 24,82	JUL 23,82	0.16	0.04	0.025	<T 0.010	<T 0.005	0.130	0.0047
JUL 29,82	JUL 28,82	0.05	0.02	0.015	0.020	<T 0.005	0.172	0.0025
JUL 30,82	JUL 29,82	0.02	0.04	0.010	0.095	0.015	0.210	0.0148
AUG 7,82	AUG 6,82	0.06	0.05	0.085	0.050	0.030	0.244	0.0098
AUG 8,82	AUG 7,82	******	******	******	******	******	******	******
AUG 9,82	AUG 8,82	<W 0.01	<W 0.01	<W 0.005	0.005	<T 0.010	0.020	0.0038
AUG 19,82	AUG 18,82	0.14	0.04	0.040	0.070	0.015	0.600	0.0065
AUG 22,82	AUG 21,82	0.08	0.04	0.030	0.020	<T 0.005	0.256	0.0054
AUG 23,82	AUG 22,82	0.04	0.04	0.015	<T 0.005	0.015	0.126	0.0166
AUG 29,82	AUG 28,82	0.40	0.11	0.100	0.080	0.050	0.430	0.0027
SEP 1,82	AUG 31,82	******	0.06	******	******	******	0.168	0.0045
SEP 2,82	SEP 1,82	0.09	0.05	0.015	0.020	0.015	0.212	0.0072
SEP 11,82	SEP 10,82	******	0.15	******	******	******	******	0.0676
SEP 12,82	SEP 11,82	0.35	0.11	0.025	0.040	0.035	0.146	0.0093
SEP 13,82	SEP 12,82	0.02	0.04	<W 0.005	0.005	0.010	0.154	0.0068
SEP 14,82	SEP 13,82	******	0.11	******	******	******	0.460	0.0191
SEP 15,82	SEP 14,82	0.04	0.08	0.005	0.010	0.015	0.580	0.0186

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM #16 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
SEP 16,82	SEP 15,82	830	830	2000	300	1	10.0	1	32045	2	1	29	CD	N
SEP 18,82	SEP 17,82	830	830	1530	1700	1	2.0	1	32046	2	1	58	C	
SEP 19,82	SEP 18,82	830	830	1100	1300	1	7.6	1	32047	2	1	84	C	HCM
SEP 26,82	SEP 25,82	830	830	****	****	1	8.0	1	32048	2	1	76	AC	H
SEP 29,82	SEP 28,82	****	830	****	****	1	5.0	1	32049	2	1	43	CD	N
SEP 30,82	SEP 29,82	830	830	1800	2300	1	9.0	1	32050	2	1	52	CD	
OCT 1,82	SEP 30,82	830	830	2200	200	1	12.0	1	32051	2	1	83	CD	
OCT 3,82	OCT 2,82	830	830	930	1200	1	7.5	1	32052	2	1	58	C	
OCT 6,82	OCT 5,82	830	830	2400	800	1	26.6	1	32053	2	1	101	C	
OCT 7,82	OCT 6,82	830	830	2300	800	1	27.2	1	32054	2	1	117	A	
OCT 8,82	OCT 7,82	830	830	1300	1500	1	8.2	1	32055	2	1	75	C	
OCT 9,82	OCT 8,82	830	830	****	****	1	23.0	1	32056	2	1	30	CD	N
OCT 11,82	OCT 10,82	830	830	2400	300	1	14.8	1	32057	2	1	91		
OCT 12,82	OCT 11,82	830	830	500	800	1	4.2	1	32058	2	1	69	C	
OCT 13,82	OCT 12,82	830	830	500	600	1	2.0	1	32059	2	1	52	C	
OCT 16,82	OCT 15,82	830	830	900	1000	1	1.0	1	32060	2	1	67		
OCT 18,82	OCT 17,82	830	830	1000	1200	1	7.4	1	32062	2	1	92	C	H
OCT 26,82	OCT 25,82	830	900	700	715	1	3.0	1	32063	2	1	****	EF	
OCT 28,82	OCT 27,82	830	830	830	1200	1	8.3	2	32064	2	1	111		
NOV 3,82	NOV 2,82	830	930	100	600	3	20.3	2	32065	2	1	105		
NOV 4,82	NOV 3,82	930	830	930	100	2	24.7	2	32066	2	1	7	CFL	NM
NOV 11,82	NOV 10,82	830	830	1000	1200	2	14.1	2	32067	2	1	****	CDGH	NH
NOV 12,82	NOV 11,82	830	830	100	800	2	11.1	2	32068	2	1	****	GH	N
NOV 20,82	NOV 19,82	830	830	1100	2000	1	23.1	2	32069	2	1	91		
NOV 22,82	NOV 21,82	830	830	500	700	2	1.5	2	32070	2	1	88		
DEC 15,82	DEC 14,82	830	830	1900	2400	2	10.1	2	32071	2	1	34	C	N
DEC 22,82	DEC 21,82	830	830	1200	200	2	9.1	2	32072	2	1	11	C	N
DEC 28,82	DEC 27,82	830	830	630	1200	2	13.5	2	32073	2	1	26	C	N

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM #16 PAGE : 5

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L		NITRATE AS N MG/L
SEP 16,82	SEP 15,82	U	192.0	5.6	******	4.83	0.0326	0.45		0.11
SEP 18,82	SEP 17,82		75.0	******	******	4.93	0.0340	0.55	<W	0.01
SEP 19,82	SEP 18,82		410.0	2.8	******	5.34	0.0306	0.30		0.02
SEP 26,82	SEP 25,82		390.0	11.8	******	5.36	0.0330	1.85		0.39
SEP 29,82	SEP 28,82	U	140.0	******	******	4.94	0.0370	1.50		0.17
SEP 30,82	SEP 29,82		301.0	9.4	******	4.93	0.0442	1.50		0.16
OCT 1,82	SEP 30,82		639.0	9.6	******	4.97	0.0458	1.50		0.15
OCT 3,82	OCT 2,82		281.0	9.6	******	4.93	0.0416	1.40		0.16
OCT 6,82	OCT 5,82		1732.0	7.8	******	4.74	0.0468	0.75		0.10
OCT 7,82	OCT 6,82		2052.0	11.8	******	4.58	0.0626	1.40		0.11
OCT 8,82	OCT 7,82		397.0	6.0	******	4.78	0.0394	0.50		0.06
OCT 9,82	OCT 8,82	U	447.0	6.0	******	4.81	0.0390	0.50		0.05
OCT 11,82	OCT 10,82		870.0	6.6	******	4.86	0.0508	0.60		0.09
OCT 12,82	OCT 11,82		186.0	******	******	5.03	0.0334	0.40		0.06
OCT 13,82	OCT 12,82		67.0	******	******	5.77	0.0280	0.50		0.04
OCT 16,82	OCT 15,82		43.0	******	******	5.50	0.0284	1.15		0.26
OCT 18,82	OCT 17,82		441.0	7.4	******	5.47	0.0358	1.00		0.23
OCT 26,82	OCT 25,82		******	******	******	******	******	******		******
OCT 28,82	OCT 27,82		591.0	11.6	******	4.68	0.0578	1.10		0.18
NOV 3,82	NOV 2,82		1374.0	4.6	******	5.16	0.0264	0.40		0.06
NOV 4,82	NOV 3,82	U	111.0	******	******	5.13	0.0260	0.25		0.03
NOV 11,82	NOV 10,82	U	128.0	******	******	5.02	0.0310	0.35		0.07
NOV 12,82	NOV 11,82	U	43.0	******	******	4.95	0.0208	0.20		0.05
NOV 20,82	NOV 19,82		1355.0	12.4	******	4.57	0.0522	1.10		0.18
NOV 22,82	NOV 21,82		85.0	******	******	4.91	0.0286	0.25		0.14
DEC 15,82	DEC 14,82	U	224.0	13.0	******	4.68	0.0450	0.80		0.41
DEC 22,82	DEC 21,82	U	65.0	******	******	4.94	0.0312	0.25		0.21
DEC 28,82	DEC 27,82	U	231.0	14.0	******	4.52	0.0514	1.05		0.24

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FERNBERG/DAILY/AEROCHEM #16 PAGE : 6

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 16,82	SEP 15,82	0.02	0.05	<W 0.005	0.025	0.015	0.106	0.0148
SEP 18,82	SEP 17,82	******	0.08	******	******	******	0.480	0.0117
SEP 19,82	SEP 18,82	0.08	0.12	0.015	0.070	0.075	0.320	0.0046
SEP 26,82	SEP 25,82	0.43	0.11	0.045	0.080	0.035	0.690	0.0044
SEP 29,82	SEP 28,82	0.29	0.07	0.040	0.060	0.030	0.250	0.0115
SEP 30,82	SEP 29,82	0.29	0.08	0.040	0.050	0.030	0.278	0.0117
OCT 1,82	SEP 30,82	0.27	0.09	0.040	0.050	0.040	0.264	0.0107
OCT 3,82	OCT 2,82	0.26	0.08	0.040	0.050	0.030	0.254	0.0117
OCT 6,82	OCT 5,82	0.03	0.04	<W 0.005	0.020	0.015	0.094	0.0182
OCT 7,82	OCT 6,82	0.02	0.04	<W 0.005	0.015	0.015	0.210	0.0263
OCT 8,82	OCT 7,82	<T 0.01	0.04	<W 0.005	0.010	0.010	0.038	0.0166
OCT 9,82	OCT 8,82	<T 0.01	0.03	<W 0.005	<W 0.005	<T 0.005	0.042	0.0155
OCT 11,82	OCT 10,82	0.02	0.05	<W 0.005	0.020	0.010	0.132	0.0138
OCT 12,82	OCT 11,82	0.02	0.13	<W 0.005	0.090	0.055	0.084	0.0093
OCT 13,82	OCT 12,82	******	0.25	******	******	******	******	0.0017
OCT 16,82	OCT 15,82	******	0.09	******	******	******	******	0.0032
OCT 18,82	OCT 17,82	0.25	0.06	0.025	0.030	0.020	0.420	0.0034
OCT 26,82	OCT 25,82	******	******	******	******	******	******	******
OCT 28,82	OCT 27,82	0.07	0.05	0.005	0.015	0.020	0.244	0.0209
NOV 3,82	NOV 2,82	0.05	0.04	<W 0.005	0.015	0.020	0.080	0.0069
NOV 4,82	NOV 3,82	0.03	0.04	<W 0.005	0.010	0.040	0.032	0.0074
NOV 11,82	NOV 10,82	0.04	0.19	<W 0.005	0.020	U 0.215	0.038	0.0095
NOV 12,82	NOV 11,82	******	0.04	******	******	******	******	0.0112
NOV 20,82	NOV 19,82	0.04	0.05	<W 0.005	0.010	0.010	0.164	0.0269
NOV 22,82	NOV 21,82	******	0.09	******	******	******	0.012	0.0123
DEC 15,82	DEC 14,82	0.17	0.10	0.020	0.030	0.020	0.260	0.0209
DEC 22,82	DEC 21,82	0.18	0.17	0.015	0.035	0.075	******	0.0115
DEC 28,82	DEC 27,82	0.03	0.09	0.005	<T 0.010	<T 0.010	0.150	0.0302

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/SES #13 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 3.82	JAN 2.82	830	830	830	100	2	7.3	2	33544	2	1	70	C	
JAN 6.82	JAN 5.82	830	900	830	1900	2	2.1	2	33545	2	1	70	CD	
JAN 11.82	JAN 9.82	900	900	830	1800	2	4.9	2	33546	2	1	40	CDF	NHM?
JAN 19.82	JAN 18.82	830	900	2300	900	2	3.3	2	33547	2	1	93	CD	
JAN 22.82	JAN 21.82	900	900	900	1100	2	0.5	2	33548	2	1	51	CD	
JAN 23.82	JAN 22.82	900	930	1300	100	2	18.0	2	33549	2	1	39	C	NM
JAN 24.82	JAN 23.82	930	900	1100	1500	2	1.5	2	33550	2	1	30	CD	NY
JAN 30.82	JAN 29.82	900	900	1000	1600	2	1.3	2	33551	2	1	****	CDG	N
FEB 2.82	FEB 1.82	830	930	1930	930	2	1.4	2	33552	2	1	101	CD	
FEB 15.82	FEB 14.82	830	830	1000	1400	2	****	*	33553	2	1	****	CD	
FEB 19.82	FEB 18.82	830	830	****	****	2	0.3	2	33554	2	1	40	C	N
FEB 21.82	FEB 20.82	830	830	1330	1600	2	0.2	2	33555	2	1	91	CD	
FEB 23.82	FEB 22.82	830	900	1100	1930	2	5.5	2	33556	2	1	34	C	N
MAR 1.82	FEB 28.82	900	830	1000	1600	2	3.4	2	33557	2	1	68	C	
MAR 10.82	MAR 9.82	830	730	2030	****	2	****	*	33558	2	1	****		
MAR 11.82	MAR 10.82	730	830	1400	2100	2	12.0	2	33559	2	1	83	C	
MAR 13.82	MAR 12.82	830	830	1600	830	3	12.0	2	33560	2	1	88	CD	
MAR 16.82	MAR 15.82	830	845	****	****	2	0.7	2	33561	2	1	65	CD	
MAR 18.82	MAR 17.82	830	830	****	****	2	3.7	2	33562	2	1	97	CD	
MAR 24.82	MAR 23.82	830	830	****	830	2	3.5	2	33563	2	1	102	CD	
MAR 25.82	MAR 24.82	830	830	830	830	2	12.9	2	33564	2	1	81	CD	
MAR 26.82	MAR 25.82	830	830	830	1300	2	0.7	2	33565	2	1	38	C	N
MAR 30.82	MAR 29.82	830	830	****	830	3	5.2	2	33566	2	1	103	D	
MAR 31.82	MAR 30.82	830	730	830	730	1	9.1	2	33567	2	1	124	D	N
APR 3.82	APR 2.82	800	830	1330	830	3	19.9	2	33568	2	1	70	C	
APR 4.82	APR 3.82	830	800	830	****	2	12.8	2	33569	2	1	52	C	HCN
APR 11.82	APR 10.82	800	800	1200	1600	2	1.6	2	33570	2	1	94	C	
APR 13.82	APR 12.82	900	730	900	1730	3	4.5	2	33571	2	1	107	C	
APR 15.82	APR 14.82	700	700	****	630	1	7.1	2	33572	2	1	98	C	
APR 16.82	APR 15.82	700	730	830	1200	1	0.5	2	33573	2	1	179	C	N
APR 17.82	APR 16.82	730	730	****	730	2	1.2	2	33574	2	1	73	CD	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/SES #13 PAGE : 2

REMOVAL DATE	EXPOSURE DATE		VOLUME ML		CONDUCT. UMHO/CM		PH FIELD		PH LAB		TOTAL H+ TO PH4.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
JAN 3,82	JAN 2,82		842.0		7.2		******		4.76		0.0460		0.30		0.17
JAN 6,82	JAN 5,82		244.0		14.9		******		4.43		0.0564		0.95		0.37
JAN 11,82	JAN 9,82	U	323.0		4.5		******		5.46		******		0.50		0.05
JAN 19,82	JAN 18,82		506.0		12.4		******		4.52		0.0678		0.30		0.35
JAN 22,82	JAN 21,82		42.0		******		******		4.70		******		0.50		0.14
JAN 23,82	JAN 22,82	U	1151.0		3.5		******		5.07		0.0416		0.20		0.04
JAN 24,82	JAN 23,82	U	75.0		******		******		4.31		******		0.65		0.61
JAN 30,82	JAN 29,82		303.0		9.2		******		4.63		0.0534		0.40		0.22
FEB 2,82	FEB 1,82		234.0		10.0		******		4.59		0.0536		0.25		0.26
FEB 15,82	FEB 14,82		106.0		******		******		3.95		******		6.80		1.12
FEB 19,82	FEB 18,82	U	20.0		******		******		4.07		******		******		******
FEB 21,82	FEB 20,82		30.0		******		******		4.20		******		******		******
FEB 23,82	FEB 22,82	U	312.0		11.7		******		4.65		0.0582		1.05		0.19
MAR 1,82	FEB 28,82		384.0		28.7		******		4.29		0.1018		1.50		0.85
MAR 10,82	MAR 9,82		26.0		******		******		4.45		0.0672		******		******
MAR 11,82	MAR 10,82		1637.0		5.7		******		5.00		0.0336		0.20		0.10
MAR 13,82	MAR 12,82		1743.0		17.7		******		4.42		0.0622		1.65		0.14
MAR 16,82	MAR 15,82		75.0		******		******		4.43		0.0672		2.20		0.47
MAR 18,82	MAR 17,82		589.0		9.5		******		4.70		0.0454		0.70		0.18
MAR 24,82	MAR 23,82		588.0		******		******		4.71		0.0430		0.85		0.28
MAR 25,82	MAR 24,82		1720.0		17.5		******		4.48		0.0606		1.95	<W	0.01
MAR 26,82	MAR 25,82	U	44.0		******		******		4.62		0.0502		1.75		0.04
MAR 30,82	MAR 29,82		886.0		40.0		******		4.20		0.0940		4.30		0.89
MAR 31,82	MAR 30,82		1859.0		27.5		******		4.47		0.0672		2.95		0.49
APR 3,82	APR 2,82		2288.0		15.8		******		4.66		0.0500		1.50		0.23
APR 4,82	APR 3,82		1092.0		5.1		******		5.24		0.0284		0.30		0.06
APR 11,82	APR 10,82		249.0		37.3		******		4.29		0.0928		5.45		0.66
APR 13,82	APR 12,82		794.0		21.5		******		4.72		0.0532		2.95		0.48
APR 15,82	APR 14,82		1150.0		28.0		******	U	6.71	U	0.0348		4.80		0.70
APR 16,82	APR 15,82		147.0	U	58.0		******	U	6.80	U	0.0332	U	10.00	U	2.10
APR 17,82	APR 16,82		144.0		19.8		******		5.00		0.0366		2.85		0.50

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/SES #13 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
JAN 3,82	JAN 2,82	0.04	0.02	<T 0.005	0.020	<T 0.010	0.012	0.0174
JAN 6,82	JAN 5,82	0.36	0.28	0.030	0.050	0.140	0.096	0.0372
JAN 11,82	JAN 9,82	0.31	0.12	0.025	0.110	0.080	<T 0.002	0.0035
JAN 19,82	JAN 18,82	0.10	0.08	0.005	0.020	0.030	0.014	0.0302
JAN 22,82	JAN 21,82	******	0.13	******	******	******	******	0.0200
JAN 23,82	JAN 22,82	0.04	<T 0.01	<T 0.005	0.010	0.010	<T 0.002	0.0085
JAN 24,82	JAN 23,82	******	0.14	******	******	******	<T 0.010	0.0490
JAN 30,82	JAN 29,82	0.07	0.13	<T 0.005	0.010	0.030	0.032	0.0234
FEB 2,82	FEB 1,82	0.02	0.08	<T 0.005	<T 0.010	0.010	0.018	0.0257
FEB 15,82	FEB 14,82	0.63	0.40	0.010	0.080	0.235	1.000	0.1122
FEB 19,82	FEB 18,82	******	******	******	******	******	******	0.0851
FEB 21,82	FEB 20,82	******	******	******	******	******	******	0.0631
FEB 23,82	FEB 22,82	0.05	0.08	<T 0.005	<T 0.005	0.025	0.236	0.0224
MAR 1,82	FEB 28,82	0.27	0.25	0.035	0.035	0.075	0.382	0.0513
MAR 10,82	MAR 9,82	******	******	******	******	******	******	0.0355
MAR 11,82	MAR 10,82	0.03	0.02	<T 0.005	<T 0.005	0.010	0.064	0.0100
MAR 13,82	MAR 12,82	0.05	0.04	<T 0.005	<T 0.005	0.025	0.194	0.0380
MAR 16,82	MAR 15,82	******	0.48	******	******	******	0.006	0.0372
MAR 18,82	MAR 17,82	0.03	0.03	<T 0.005	<T 0.005	0.020	U 0.170	0.0200
MAR 24,82	MAR 23,82	******	0.08	******	******	******	******	0.0195
MAR 25,82	MAR 24,82	0.03	<W 0.01	<T 0.005	0.015	0.020	0.170	0.0331
MAR 26,82	MAR 25,82	******	0.15	******	******	******	******	0.0240
MAR 30,82	MAR 29,82	0.59	0.18	0.080	0.050	0.150	0.630	0.0631
MAR 31,82	MAR 30,82	0.19	0.13	0.015	0.045	0.065	0.600	0.0339
APR 3,82	APR 2,82	0.18	0.04	0.055	<T 0.015	0.030	0.128	0.0219
APR 4,82	APR 3,82	0.05	0.08	<W 0.005	<T 0.015	<T 0.010	<W 0.002	0.0058
APR 11,82	APR 10,82	0.18	0.10	0.035	0.030	0.105	1.180	0.0513
APR 13,82	APR 12,82	0.37	0.10	0.035	0.025	0.030	0.790	0.0191
APR 15,82	APR 14,82	U 1.00	0.10	U 0.090	0.070	0.035	2.050	U 0.0002
APR 16,82	APR 15,82	U 2.14	0.31	U 0.195	0.285	U 0.145	U 4.050	U 0.0002
APR 17,82	APR 16,82	0.47	0.24	0.075	0.055	0.235	0.670	0.0100

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAY 4,82	MAY 3,82	955	955	****	****	1	2.5	1	33575	2	1	101	CD	
MAY 5,82	MAY 4,82	955	1030	955	930	1	4.3	1	33576	2	1	108	C	H
MAY 6,82	MAY 5,82	1030	925	****	****	1	2.1	1	33577	2	1	107	C	H
MAY 7,82	MAY 6,82	925	945	****	****	1	2.4	1	33578	2	1	97	D	C
MAY 10,82	MAY 9,82	945	945	****	****	1	11.0	1	33579	2	1	101	C	
MAY 11,82	MAY 10,82	945	935	****	****	1	15.4	1	33580	2	1	104	C	
MAY 19,82	MAY 18,82	1000	830	1630	200	1	3.0	1	33581	2	1	89	C	C
MAY 30,82	MAY 29,82	900	900	2000	300	1	1.6	1	33582	2	1	85	CD	T
MAY 31,82	MAY 30,82	900	900	200	900	1	0.4	1	33583	2	1	97	D	
JUN 1,82	MAY 31,82	900	900	1900	200	1	1.0	1	33584	2	1	84	C	
JUN 2,82	JUN 1,82	900	900	1100	2400	1	2.4	1	33585	2	1	92	C	
JUN 8,82	JUN 7,82	830	830	1000	1100	1	2.8	1	33586	2	1	94		
JUN 10,82	JUN 9,82	830	730	1500	730	1	17.2	1	33587	2	1	106		
JUN 11,82	JUN 10,82	730	700	730	1300	1	3.3	1	33588	2	1	90	C	C
JUN 12,82	JUN 11,82	700	700	900	1300	1	0.6	1	33589	2	1	119	C	
JUN 14,82	JUN 13,82	730	730	200	730	1	17.2	1	33590	2	1	101	D	HM
JUN 15,82	JUN 14,82	730	800	200	800	1	3.0	1	33591	2	1	99	C	
JUN 16,82	JUN 15,82	800	800	800	1100	1	0.7	1	33592	2	1	80		
JUN 17,82	JUN 16,82	800	800	2100	800	1	7.5	1	33593	2	1	105	C	C
JUN 20,82	JUN 19,82	730	730	1300	1600	1	1.0	1	33594	2	1	49	C	N
JUN 21,82	JUN 20,82	730	800	1800	200	1	3.6	1	33595	2	1	96	C	C
JUN 22,82	JUN 21,82	800	800	1100	1700	1	4.8	1	33596	2	1	95	C	M
JUN 24,82	JUN 23,82	830	830	2400	800	1	9.5	1	33597	2	1	102	D	HM
JUN 25,82	JUN 24,82	830	830	1615	1715	1	2.2	1	33598	2	1	98	D	
JUN 28,82	JUN 27,82	800	800	830	1000	1	2.0	1	33599	2	1	98	CD	
JUL 3,82	JUL 2,82	800	800	2400	800	1	13.1	1	33600	2	1	99	D	
JUL 4,82	JUL 3,82	800	800	800	2400	1	10.0	1	33601	2	1	100	D	
JUL 5,82	JUL 4,82	800	830	2400	730	1	3.9	1	33602	2	1	101	D	
JUL 6,82	JUL 5,82	830	800	1845	800	1	83.0	1	33603	2	1	****	DG	C
JUL 7,82	JUL 6,82	800	800	2300	600	1	26.4	1	33604	2	1	102	D	
JUL 10,82	JUL 9,82	800	800	1400	1800	1	1.6	1	33605	2	1	106	D	
JUL 13,82	JUL 12,82	800	800	1800	1845	1	20.4	1	33606	2	1	111	CD	CM
JUL 14,82	JUL 13,82	800	800	2230	2430	1	11.6	1	33607	2	1	103	CD	CM
JUL 16,82	JUL 15,82	1000	1000	2430	1000	1	0.4	1	33608	2	1	74	D	
JUL 17,82	JUL 16,82	1000	900	2430	800	1	9.4	1	33609	2	1	104	CD	
JUL 22,82	JUL 21,82	800	800	915	1200	1	2.4	1	33610	2	1	92	C	
JUL 27,82	JUL 26,82	800	800	1930	1950	1	0.8	1	33611	2	1	74		
JUL 28,82	JUL 27,82	800	800	1500	1530	1	2.4	1	33612	2	1	101	CD	M
JUL 30,82	JUL 29,82	830	830	1250	200	1	2.3	1	33613	2	1	108	D	HC
AUG 3,82	AUG 2,82	830	830	1600	730	1	41.0	1	33614	2	1	97	C	HM

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
AP.OS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13 PAGE : 2

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
MAY 4.82	MAY 3.82	163.0	U 60.0	******	U 7.18	0.0474	U 8.60	U 1.62
MAY 5.82	MAY 4.82	300.0	17.1	******	4.76	0.0506	2.50	0.41
MAY 6.82	MAY 5.82	145.0	6.2	******	5.39	0.0432	0.70	0.20
MAY 7.82	MAY 6.82	150.0	4.0	******	5.98	0.0272	0.35	0.11
MAY 10.82	MAY 9.82	714.0	15.9	******	4.60	0.0660	1.90	0.27
MAY 11.82	MAY 10.82	1035.0	19.1	******	4.90	0.0702	3.20	0.49
MAY 19.82	MAY 18.82	173.0	8.6	******	5.27	0.0370	1.10	0.10
MAY 30.82	MAY 29.82	88.0	U 89.0	******	3.64	0.2244	U 11.95	0.83
MAY 31.82	MAY 30.82	25.0	******	******	5.84	0.0230	******	******
JUN 1.82	MAY 31.82	54.0	******	******	4.56	0.0376	0.95	0.11
JUN 2.82	JUN 1.82	142.0	14.7	******	6.09	0.0182	0.10	<W 0.01
JUN 8.82	JUN 7.82	170.0	20.1	******	4.43	0.0582	3.25	0.25
JUN 10.82	JUN 9.82	1176.0	10.4	******	4.70	0.0328	1.10	0.12
JUN 11.82	JUN 10.82	191.0	3.5	******	5.89	0.0170	0.30	0.07
JUN 12.82	JUN 11.82	46.0	******	******	5.64	0.0198	0.75	0.09
JUN 14.82	JUN 13.82	1124.0	4.3	******	5.13	0.0276	0.30	0.04
JUN 15.82	JUN 14.82	192.0	8.6	******	4.77	0.0900	0.75	0.06
JUN 16.82	JUN 15.82	36.0	******	******	5.60	0.0292	******	******
JUN 17.82	JUN 16.82	505.0	8.5	******	4.65	0.0516	1.35	0.19
JUN 20.82	JUN 19.82	U 32.0	******	******	4.79	0.0466	******	******
JUN 21.82	JUN 20.82	222.0	4.6	******	5.19	0.0328	0.25	0.04
JUN 22.82	JUN 21.82	295.0	2.0	******	5.41	0.0300	<W 0.05	<W 0.01
JUN 24.82	JUN 23.82	626.0	20.6	******	U 6.43	0.0450	2.20	0.66
JUN 25.82	JUN 24.82	139.0	******	******	4.99	0.0286	0.45	0.07
JUN 28.82	JUN 27.82	126.0	******	******	5.54	0.0290	0.30	0.10
JUL 3.82	JUL 2.82	839.0	10.5	******	5.01	0.0302	1.05	0.19
JUL 4.82	JUL 3.82	645.0	14.6	******	4.57	0.0616	1.40	0.09
JUL 5.82	JUL 4.82	253.0	8.6	******	6.23	0.0204	1.00	0.34
JUL 6.82	JUL 5.82	5599.0	5.9	******	5.84	0.0176	0.60	0.13
JUL 7.82	JUL 6.82	1727.0	5.6	******	5.09	0.0244	0.35	0.08
JUL 10.82	JUL 9.82	109.0	******	******	4.88	0.0278	0.50	0.21
JUL 13.82	JUL 12.82	1458.0	9.9	******	4.90	0.0342	0.40	0.04
JUL 14.82	JUL 13.82	773.0	11.5	******	4.77	0.0378	0.50	0.06
JUL 16.82	JUL 15.82	19.0	******	******	4.12	0.1062	******	******
JUL 17.82	JUL 16.82	629.0	16.6	******	4.95	0.0370	1.60	0.40
JUL 22.82	JUL 21.82	142.0	9.4	******	4.93	0.0354	0.85	0.26
JUL 27.82	JUL 26.82	38.0	******	******	******	******	0.50	0.05
JUL 28.82	JUL 27.82	156.0	10.1	******	4.53	0.0484	0.60	0.07
JUL 30.82	JUL 29.82	160.0	15.4	******	5.53	0.0324	1.40	0.49
AUG 3.82	AUG 2.82	2561.0	11.7	******	6.15	0.0354	1.30	0.31

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAY 4,82	MAY 3,82	U 3.66	0.21	U 0.700	0.260	0.170	U 3.750	U 0.0001
MAY 5,82	MAY 4,82	0.43	<W 0.01	0.050	0.050	0.060	0.680	0.0174
MAY 6,82	MAY 5,82	0.35	<W 0.01	0.055	0.040	0.045	0.162	0.0041
MAY 7,82	MAY 6,82	0.21	<W 0.01	0.040	0.020	0.020	0.104	0.0010
MAY 10,82	MAY 9,82	0.15	<W 0.01	0.020	0.020	<T 0.010	0.390	0.0251
MAY 11,82	MAY 10,82	0.63	0.04	0.095	0.100	0.110	0.670	0.0126
MAY 19,82	MAY 18,82	0.10	0.03	0.015	0.065	0.035	0.206	0.0054
MAY 30,82	MAY 29,82	******	0.17	******	******	******	******	0.2291
MAY 31,82	MAY 30,82	******	******	******	******	******	******	0.0014
JUN 1,82	MAY 31,82	******	0.04	******	******	******	******	0.0275
JUN 2,82	JUN 1,82	0.08	0.02	0.020	0.175	0.015	******	0.0008
JUN 8,82	JUN 7,82	0.16	0.04	0.025	0.040	0.030	0.730	0.0372
JUN 10,82	JUN 9,82	0.09	0.04	0.010	<T 0.010	0.065	0.102	0.0200
JUN 11,82	JUN 10,82	0.16	0.02	0.035	0.030	0.015	0.104	0.0013
JUN 12,82	JUN 11,82	******	0.04	******	******	******	******	0.0023
JUN 14,82	JUN 13,82	0.03	0.01	<W 0.005	<W 0.005	<T 0.005	0.084	0.0074
JUN 15,82	JUN 14,82	0.03	0.02	<W 0.005	<T 0.010	0.015	0.042	0.0170
JUN 16,82	JUN 15,82	******	******	******	******	******	******	0.0025
JUN 17,82	JUN 16,82	0.11	0.04	0.020	0.080	0.015	0.258	0.0224
JUN 20,82	JUN 19,82	******	******	******	******	******	******	0.0162
JUN 21,82	JUN 20,82	0.02	0.01	<W 0.005	<T 0.005	0.015	<T 0.004	0.0065
JUN 22,82	JUN 21,82	<W 0.01	<W 0.01	<W 0.005	<W 0.005	<T 0.010	<W 0.002	0.0039
JUN 24,82	JUN 23,82	U 1.03	0.10	0.210	0.065	0.075	1.280	U 0.0004
JUN 25,82	JUN 24,82	0.03	0.03	0.010	<T 0.010	<T 0.005	0.076	0.0102
JUN 28,82	JUN 27,82	0.10	<W 0.01	0.015	<T 0.015	<W 0.005	0.094	0.0029
JUL 3,82	JUL 2,82	0.20	0.03	0.040	<T 0.010	<T 0.005	0.232	0.0098
JUL 4,82	JUL 3,82	0.03	<T 0.02	<W 0.005	<T 0.010	<W 0.005	0.144	0.0269
JUL 5,82	JUL 4,82	0.35	0.08	0.055	<T 0.015	0.035	0.470	0.0006
JUL 6,82	JUL 5,82	0.17	0.04	0.035	0.020	0.045	0.208	0.0014
JUL 7,82	JUL 6,82	0.02	<W 0.01	<W 0.005	<T 0.005	<W 0.005	0.066	0.0081
JUL 10,82	JUL 9,82	******	0.11	******	******	******	0.042	0.0132
JUL 13,82	JUL 12,82	0.03	0.03	<W 0.005	<T 0.010	0.060	0.026	0.0126
JUL 14,82	JUL 13,82	0.03	<T 0.02	0.010	<T 0.010	0.045	0.042	0.0170
JUL 16,82	JUL 15,82	******	******	******	******	******	******	0.0759
JUL 17,82	JUL 16,82	0.31	0.09	0.035	0.020	0.060	0.510	0.0112
JUL 22,82	JUL 21,82	0.14	0.07	0.025	0.075	0.015	0.294	0.0117
JUL 27,82	JUL 26,82	******	0.08	******	******	******	******	******
JUL 28,82	JUL 27,82	0.02	0.06	0.005	<T 0.010	0.035	<W 0.002	0.0295
JUL 30,82	JUL 29,82	0.20	0.11	0.045	0.130	0.025	0.770	0.0030
AUG 3,82	AUG 2,82	0.39	0.05	0.085	0.070	0.040	0.750	0.0007

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
AUG 4.82	AUG 3.82	830	830	1100	300	1	0.4	1	33615	2	1	****	E	
AUG 5.82	AUG 4.82	830	830	300	830	1	0.2	1	33616	2	1	****	E	
AUG 6.82	AUG 5.82	830	830	830	1100	1	0.2	1	33617	2	1	****	E	
AUG 7.82	AUG 6.82	830	830	1500	1830	1	0.6	1	33618	2	1	49		N
AUG 8.82	AUG 7.82	830	830	1300	1345	1	0.7	1	33619	2	1	****	E	
AUG 9.82	AUG 8.82	830	900	1200	200	1	5.8	1	33620	2	1	102	C	M
AUG 14.82	AUG 13.82	800	800	200	800	1	0.3	1	33621	2	1	****	E	
AUG 19.82	AUG 18.82	830	830	2100	200	1	37.4	1	33622	2	1	106		
AUG 22.82	AUG 21.82	830	830	1830	200	1	9.4	1	33623	2	1	102		H
AUG 23.82	AUG 22.82	830	830	2305	300	1	3.8	1	33624	2	1	102		HM
AUG 25.82	AUG 24.82	830	830	1700	1900	1	0.2	1	33625	2	1	****	E	
AUG 26.82	AUG 25.82	830	830	1100	1300	1	1.3	1	33626	2	1	78	C	
AUG 28.82	AUG 27.82	830	830	300	600	1	0.4	1	33627	2	1	****	E	
AUG 29.82	AUG 28.82	830	830	300	730	1	9.0	1	33628	2	1	101	C	HM
AUG 30.82	AUG 29.82	830	830	300	830	1	0.8	1	33629	2	1	105		
AUG 31.82	AUG 30.82	830	830	300	830	1	0.2	1	33630	2	1	7	E	N
SEP 1.82	AUG 31.82	830	830	1500	1900	1	6.8	1	33631	2	1	97		HM
SEP 2.82	SEP 1.82	830	830	40	830	1	5.2	1	33632	2	1	101		HM
SEP 8.82	SEP 7.82	830	830	930	830	1	0.2	1	33633	2	1	7	E	N
SEP 10.82	SEP 9.82	830	830	300	830	1	0.2	1	33634	2	1	7	E	N
SEP 11.82	SEP 10.82	830	830	1800	830	1	0.8	1	33635	2	1	60	AD	
SEP 12.82	SEP 11.82	830	830	300	815	1	11.2	1	33636	2	1	102		
SEP 13.82	SEP 12.82	830	830	2200	700	1	12.4	1	33637	2	1	103		
SEP 15.82	SEP 14.82	830	830	900	1030	1	0.4	1	33638	2	1	3	E	N
SEP 17.82	SEP 16.82	830	800	200	800	1	7.6	1	33639	2	1	103		
SEP 18.82	SEP 17.82	800	800	1600	1645	1	1.2	1	33640	2	1	89	C	
SEP 19.82	SEP 18.82	800	800	200	600	1	0.3	1	33641	2	1	****	E	
SEP 20.82	SEP 19.82	800	800	1500	1800	1	1.1	1	33642	2	1	77	C	
SEP 24.82	SEP 23.82	830	830	1320	1800	1	5.0	1	33643	2	1	97	C	H
SEP 28.82	SEP 27.82	845	845	2100	845	1	5.6	1	33644	2	1	94	CD	
SEP 29.82	SEP 28.82	845	845	845	1700	1	6.5	1	33645	2	1	99	AC	
SEP 30.82	SEP 29.82	845	830	1530	1730	1	1.2	1	33646	2	1	96	C	
OCT 2.82	OCT 1.82	830	830	200	830	1	2.2	1	33647	2	1	89	D	
OCT 3.82	OCT 2.82	830	830	830	1400	1	9.4	1	33648	2	1	97	D	
OCT 6.82	OCT 4.82	830	845	****	****	1	9.0	1	33649	2	1	77		7
OCT 7.82	OCT 6.82	845	830	845	830	1	36.4	1	33650	2	1	96		
OCT 8.82	OCT 7.82	830	800	845	200	1	2.0	1	33651	2	1	85		
OCT 9.82	OCT 8.82	800	845	2200	800	1	0.4	1	33652	2	1	****	E	
OCT 10.82	OCT 9.82	845	845	1900	845	1	16.2	1	33653	2	1	95		
OCT 11.82	OCT 10.82	845	830	845	830	1	8.2	1	33654	2	1	98	C	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13 PAGE : 5

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
AUG 4.82	AUG 3.82	******	******	******	******	******	******	******
AUG 5.82	AUG 4.82	******	******	******	******	******	******	******
AUG 6.82	AUG 5.82	******	******	******	******	******	******	******
AUG 7.82	AUG 6.82	U 19.0	******	******	4.50	0.0666	******	******
AUG 8.82	AUG 7.82	******	******	******	******	******	******	******
AUG 9.82	AUG 8.82	381.0	1.8	******	5.54	0.0210	<T 0.05	<W 0.01
AUG 14.82	AUG 13.82	******	******	******	******	******	******	******
AUG 19.82	AUG 18.82	2546.0	14.9	******	4.70	0.0584	2.65	0.22
AUG 22.82	AUG 21.82	616.0	6.4	******	5.21	0.0498	0.75	0.18
AUG 23.82	AUG 22.82	250.0	3.7	******	4.99	0.0388	0.15	0.03
AUG 25.82	AUG 24.82	******	******	******	******	******	******	******
AUG 26.82	AUG 25.82	65.0	******	******	5.61	0.0280	0.40	0.07
AUG 28.82	AUG 27.82	******	******	******	******	******	******	******
AUG 29.82	AUG 28.82	586.0	3.2	******	5.20	0.0376	0.15	0.06
AUG 30.82	AUG 29.82	54.0	******	******	5.65	0.0332	0.80	0.14
AUG 31.82	AUG 30.82	U 1.0	******	******	******	******	******	******
SEP 1.82	AUG 31.82	423.0	8.7	******	4.73	0.0574	0.80	0.12
SEP 2.82	SEP 1.82	339.0	3.9	******	5.09	0.0350	0.25	0.06
SEP 8.82	SEP 7.82	U 1.0	******	******	******	******	******	******
SEP 10.82	SEP 9.82	U 1.0	******	******	******	******	******	******
SEP 11.82	SEP 10.82	31.0	******	******	3.58	0.3760	U 10.00	U 1.19
SEP 12.82	SEP 11.82	735.0	12.9	******	4.75	0.0590	2.05	0.28
SEP 13.82	SEP 12.82	820.0	8.2	******	4.84	0.0554	0.95	0.16
SEP 15.82	SEP 14.82	U 1.0	******	******	******	******	******	******
SEP 17.82	SEP 16.82	504.0	6.8	******	4.84	0.0364	0.40	0.09
SEP 18.82	SEP 17.82	69.0	******	******	4.95	0.0318	0.25	0.04
SEP 19.82	SEP 18.82	******	******	******	******	******	******	******
SEP 20.82	SEP 19.82	55.0	******	******	4.98	0.0284	0.30	0.03
SEP 24.82	SEP 23.82	314.0	11.9	******	5.00	0.0382	1.65	0.37
SEP 28.82	SEP 27.82	340.0	25.2	******	4.38	0.0806	3.15	0.59
SEP 29.82	SEP 28.82	415.0	U 40.8	******	4.37	U 0.0822	U 7.90	0.91
SEP 30.82	SEP 29.82	74.0	******	******	U 6.70	U 0.0328	3.80	0.64
OCT 2.82	OCT 1.82	126.0	******	******	4.36	0.0724	3.25	0.24
OCT 3.82	OCT 2.82	589.0	******	******	4.41	0.0788	2.80	0.29
OCT 6.82	OCT 4.82	446.0	8.9	******	4.78	0.0482	0.90	0.20
OCT 7.82	OCT 6.82	2251.0	18.5	******	4.36	0.0712	2.05	0.18
OCT 8.82	OCT 7.82	110.0	******	******	4.65	0.0436	0.60	0.21
OCT 9.82	OCT 8.82	******	******	******	******	******	******	******
OCT 10.82	OCT 9.82	987.0	12.2	******	4.54	0.0554	1.10	0.14
OCT 11.82	OCT 10.82	520.0	22.8	******	4.28	0.0820	2.25	0.29

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
AUG 4,82	AUG 3,82	******	******	******	******	******	******	******
AUG 5,82	AUG 4,82	******	******	******	******	******	******	******
AUG 6,82	AUG 5,82	******	******	******	******	******	******	******
AUG 7,82	AUG 6,82	******	******	******	******	******	******	0.0316
AUG 8,82	AUG 7,82	******	******	******	******	******	******	******
AUG 9,82	AUG 8,82	<W 0.01	0.06	<W 0.005	0.030	0.050	0.032	0.0029
AUG 14,82	AUG 13,82	******	******	******	******	******	******	******
AUG 19,82	AUG 18,82	<T 0.01	0.05	0.030	0.040	<T 0.005	0.720	0.0200
AUG 22,82	AUG 21,82	0.12	0.06	0.035	0.025	0.015	0.354	0.0062
AUG 23,82	AUG 22,82	0.01	0.05	0.005	<T 0.005	<T 0.005	0.036	0.0102
AUG 25,82	AUG 24,82	******	******	******	******	******	******	******
AUG 26,82	AUG 25,82	******	0.05	******	******	******	0.114	0.0025
AUG 28,82	AUG 27,82	******	******	******	******	******	******	******
AUG 29,82	AUG 28,82	0.02	0.03	0.015	<T 0.005	<T 0.005	0.076	0.0063
AUG 30,82	AUG 29,82	******	0.20	******	******	******	******	0.0022
AUG 31,82	AUG 30,82	******	******	******	******	******	******	******
SEP 1,82	AUG 31,82	0.10	0.07	0.010	0.010	U 0.480	0.172	0.0186
SEP 2,82	SEP 1,82	0.04	0.05	0.005	<W 0.005	0.050	0.076	0.0081
SEP 8,82	SEP 7,82	******	******	******	******	******	******	******
SEP 10,82	SEP 9,82	******	******	******	******	******	******	******
SEP 11,82	SEP 10,82	******	U 0.28	******	******	******	******	0.2630
SEP 12,82	SEP 11,82	0.20	0.15	0.015	0.015	0.025	0.550	0.0178
SEP 13,82	SEP 12,82	0.10	0.07	0.005	0.010	0.015	0.244	0.0145
SEP 15,82	SEP 14,82	******	******	******	******	******	******	******
SEP 17,82	SEP 16,82	0.01	0.06	<W 0.005	<W 0.005	0.020	0.088	0.0145
SEP 18,82	SEP 17,82	0.02	0.06	<W 0.005	<W 0.005	0.035	******	0.0112
SEP 19,82	SEP 18,82	******	******	******	******	******	******	******
SEP 20,82	SEP 19,82	******	0.09	******	******	******	******	0.0105
SEP 24,82	SEP 23,82	0.46	0.11	0.040	0.060	0.055	0.570	0.0100
SEP 28,82	SEP 27,82	0.46	0.15	0.060	0.070	0.110	0.700	0.0417
SEP 29,82	SEP 28,82	U 2.35	U 0.30	0.225	0.190	U 0.200	0.850	0.0427
SEP 30,82	SEP 29,82	U 2.00	U 0.35	U 0.205	0.330	U 0.265	******	U 0.0002
OCT 2,82	OCT 1,82	0.30	0.21	0.030	0.040	0.155	0.470	0.0437
OCT 3,82	OCT 2,82	0.46	0.12	0.055	0.040	0.075	0.380	0.0389
OCT 6,82	OCT 4,82	0.07	0.04	0.010	0.010	<T 0.005	0.258	0.0166
OCT 7,82	OCT 6,82	0.06	0.05	0.005	0.020	0.010	0.308	0.0437
OCT 8,82	OCT 7,82	0.10	0.09	0.005	0.055	0.070	0.128	0.0224
OCT 9,82	OCT 8,82	******	******	******	******	******	******	******
OCT 10,82	OCT 9,82	0.03	0.04	<W 0.005	0.010	<T 0.005	0.094	0.0288
OCT 11,82	OCT 10,82	0.07	0.06	<W 0.005	0.020	0.010	0.258	0.0525

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
OCT 12.82	OCT 11.82	830	830	830	830	1	8.2	1	33655	2	1	102		
OCT 13.82	OCT 12.82	830	830	830	1530	1	4.6	1	33656	2	1	97	C	HM
OCT 14.82	OCT 13.82	830	830	2400	400	1	0.4	1	33657	2	1	****	E	
OCT 16.82	OCT 15.82	830	830	1330	1530	2	0.3	2	33659	2	1	****	E	
OCT 18.82	OCT 17.82	930	900	1130	2100	3	5.3	2	33661	2	1	93		H
OCT 19.82	OCT 18.82	900	830	1000	200	1	5.6	2	33663	2	1	110	C	
OCT 20.82	OCT 19.82	830	845	1900	2100	2	0.2	2	33665	2	1	****	E	
OCT 29.82	OCT 28.82	830	830	2230	830	1	****	*	33667	2	1	****	C	
OCT 30.82	OCT 29.82	830	830	830	1500	1	1.9	2	33669	2	1	164	0	NH
NOV 4.82	NOV 3.82	845	845	845	845	2	13.7	2	33671	2	1	39	C	N
NOV 11.82	NOV 10.82	800	800	1230	2000	*	7.9	2	33675	2	1	55	CM	
NOV 20.82	NOV 19.82	900	1000	1300	1000	1	13.9	2	33679	2	1	63		
NOV 21.82	NOV 20.82	1000	900	1000	2100	1	****	*	33681	2	1	****		
DEC 1.82	NOV 30.82	830	830	830	300	1	0.6	2	33685	2	1	80		
DEC 2.82	DEC 1.82	830	830	300	830	1	0.4	2	33687	2	1	35	E	N
DEC 3.82	DEC 2.82	830	830	830	300	*	2.3	2	33689	2	1	113		
DEC 6.82	DEC 5.82	830	830	1200	1800	2	0.3	2	33692	2	1	****	E	
DEC 7.82	DEC 6.82	830	830	830	1130	2	0.2	2	33694	2	1	****	E	
DEC 10.82	DEC 9.82	830	830	300	830	2	0.3	2	33696	2	1	****	E	
DEC 19.82	DEC 18.82	900	900	1800	900	3	0.2	2	33703	2	1	****	E	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13 PAGE : 8

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD	PH LAB	TOTAL H+ TO PH4.3 MG/L	SULPHATE MG/L	NITRATE AS N MG/L
OCT 12.82	OCT 11.82		540.0	9.4	******	4.68	0.0486	0.65	0.12
OCT 13.82	OCT 12.82		288.0	3.8	******	5.03	0.0326	0.25	0.04
OCT 14.82	OCT 13.82		******	******	******	******	******	******	******
OCT 16.82	OCT 15.82		******	******	******	******	******	******	******
OCT 18.82	OCT 17.82		318.0	5.6	******	5.18	0.0300	0.50	0.12
OCT 19.82	OCT 18.82		396.0	8.4	******	4.86	0.0400	0.70	0.17
OCT 20.82	OCT 19.82		******	******	******	******	******	******	******
OCT 29.82	OCT 28.82		548.0	14.6	******	4.54	0.0590	1.55	0.23
OCT 30.82	OCT 29.82		200.0	******	******	5.55	0.0282	1.25	0.23
NOV 4.82	NOV 3.82	U	344.0	7.4	******	4.80	0.0386	0.50	0.12
NOV 11.82	NOV 10.82		283.0	5.6	******	4.92	0.0338	******	******
NOV 20.82	NOV 19.82		569.0	28.5	******	4.10	0.0990	2.40	0.49
NOV 21.82	NOV 20.82		887.0	10.0	******	4.76	0.0408	1.10	0.18
DEC 1.82	NOV 30.82		31.0	******	******	******	******	******	******
DEC 2.82	DEC 1.82	U	9.0	******	******	3.70	0.2480	******	******
DEC 3.82	DEC 2.82		168.0	******	******	3.95	0.1424	4.40	0.84
DEC 6.82	DEC 5.82		******	******	******	******	******	******	******
DEC 7.82	DEC 6.82		******	******	******	******	******	******	******
DEC 10.82	DEC 9.82		******	******	******	******	******	******	******
DEC 19.82	DEC 18.82		******	******	******	******	******	******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : FORBES TWSP/DAILY/AEROCHEM #13 PAGE : 9

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L		CHLORIDE MG/L		MAGNESIM MG/L		POTASSIM MG/L		SODIUM MG/L		AMMONIUM AS N MG/L	FREE H+ LAB MG/L
OCT 12,82	OCT 11,82	0.02		0.05	<W	0.005		0.020		0.030		0.060	0.0209
OCT 13,82	OCT 12,82	0.01	<W	0.03	<W	0.005		0.010	<T	0.005		0.140	0.0093
OCT 14,82	OCT 13,82	******		******		******		******		******		******	******
OCT 16,82	OCT 15,82	******		******		******		******		******		******	******
OCT 18,82	OCT 17,82	0.10		0.03		0.005		0.010		0.010		0.184	0.0066
OCT 19,82	OCT 18,82	0.11		0.04		0.010		0.020		0.020		0.190	0.0138
OCT 20,82	OCT 19,82	******		******		******		******		******		******	******
OCT 29,82	OCT 28,82	0.08		0.04		0.005		0.020		0.020		0.308	0.0288
OCT 30,82	OCT 29,82	0.17		0.06		0.025		0.020	U	0.550		0.222	0.0028
NOV 4,82	NOV 3,82	0.07		0.04		0.005	<T	0.005		0.020		0.040	0.0158
NOV 11,82	NOV 10,82	0.06		******	<W	0.005		0.010		0.020		0.026	0.0120
NOV 20,82	NOV 19,82	0.13		0.12	<W	0.005		0.045		0.035		0.286	0.0794
NOV 21,82	NOV 20,82	0.09		0.07	<W	0.005		0.010		0.015		0.236	0.0174
DEC 1,82	NOV 30,82	******		******		******		******		******		******	******
DEC 2,82	DEC 1,82	******		******		******		******		******		******	0.1995
DEC 3,82	DEC 2,82	0.19		0.25		0.020		0.050		0.140		0.490	0.1122
DEC 6,82	DEC 5,82	******		******		******		******		******		******	******
DEC 7,82	DEC 6,82	******		******		******		******		******		******	******
DEC 10,82	DEC 9,82	******		******		******		******		******		******	******
DEC 19,82	DEC 18,82	******		******		******		******		******		******	******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/DAILY/SES #15 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
FEB 26,82	FEB 25,82	800	800	****	****	2	****	2	32509	2	1	****	CE	
MAR 1,82	FEB 26,82	800	800	****	****	2	****	2	32510	2	1	****	CDB	Z
MAR 8,82	MAR 5,82	800	800	****	****	2	****	2	32511	2	1	****	CD	Z
MAR 10,82	MAR 9,82	800	800	1700	****	2	****	2	32512	2	1	****	C	
MAR 11,82	MAR 10,82	800	800	1200	1700	2	14.1	2	32513	2	1	77	CD	
MAR 15,82	MAR 12,82	800	800	****	****	3	7.3	2	32514	2	1	111	CD	Z
MAR 17,82	MAR 16,82	800	800	****	****	2	0.6	2	32515	2	1	60	C	
MAR 18,82	MAR 17,82	800	800	****	****	2	****	2	32516	2	1	****	CDG	
MAR 22,82	MAR 19,82	800	800	****	****	3	****	2	32517	2	1	****	BCD	Z
MAR 24,82	MAR 23,82	800	800	****	****	2	3.3	2	32518	2	1	76	ACD	
MAR 25,82	MAR 24,82	800	800	****	****	2	****	2	32519	2	1	****	C	
APR 14,82	APR 8,82	800	800	****	****	3	6.9	2	32520	2	1	100	CD	Z
APR 15,82	APR 14,82	800	800	****	****	1	2.1	2	32521	2	1	90	BCD	
APR 19,82	APR 16,82	800	800	****	****	1	****	2	32522	2	1	****		Z

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/DAILY/SES #15 PAGE : 2

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
FEB 26.82	FEB 25.82	8.0	******	******		******		******		******		******
MAR 1.82	FEB 26.82	337.0	29.9	******		4.44		0.0860		2.80		1.13
MAR 8.82	MAR 5.82	141.0	9.2	******		4.68		******		0.35		0.29
MAR 10.82	MAR 9.82	77.0	******	******	U	5.69		******		******		******
MAR 11.82	MAR 10.82	1789.0	5.4	******		5.10		0.0376		0.20		0.09
MAR 15.82	MAR 12.82	1329.0	13.9	******		4.68		0.0528		1.30		0.22
MAR 17.82	MAR 16.82	60.0	******	******		3.81		0.2086		4.95		0.77
MAR 18.82	MAR 17.82	808.0	9.2	******		4.71		0.0442		0.45		0.14
MAR 22.82	MAR 19.82	69.0	******	******		4.33		0.0862		2.30		0.20
MAR 24.82	MAR 23.82	415.0	25.8	******		4.36		0.0848		3.55		0.53
MAR 25.82	MAR 24.82	48.0	******	******	U	5.21		0.0916		0.60	<W	0.01
APR 14.82	APR 8.82	1142.0	11.6	******		5.22		0.0460		1.70		0.26
APR 15.82	APR 14.82	313.0	28.0	******	U	6.90	U	0.0408		3.25		0.77
APR 19.82	APR 16.82	20.0	******	******		4.89		0.0528		******		******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/DAILY/SES #15 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
FEB 26,82	FEB 25,82	******	******	******	******	******	******	******
MAR 1,82	FEB 26,82	0.50	0.12	0.060	0.030	0.065	1.110	0.0363
MAR 8,82	MAR 5,82	0.20	0.13	0.050	0.030	0.055	<T 0.002	0.0209
MAR 10,82	MAR 9,82	******	******	******	******	******	0.520	U 0.0020
MAR 11,82	MAR 10,82	0.02	0.02	<T 0.005	<T 0.005	0.005	0.060	0.0079
MAR 15,82	MAR 12,82	0.11	0.03	0.015	0.025	0.030	0.240	0.0209
MAR 17,82	MAR 16,82	******	0.22	******	******	******	******	0.1549
MAR 18,82	MAR 17,82	0.02	0.03	<T 0.005	<T 0.005	0.010	0.012	0.0195
MAR 22,82	MAR 19,82	******	0.14	******	******	******	******	0.0468
MAR 24,82	MAR 23,82	0.42	0.26	0.050	0.085	0.160	0.860	0.0437
MAR 25,82	MAR 24,82	******	0.78	******	******	******	******	U 0.0062
APR 14,82	APR 8,82	0.25	0.09	0.025	0.060	0.035	0.500	0.0060
APR 15,82	APR 14,82	U 1.50	0.15	U 0.175	0.200	0.090	1.640	U 0.0001
APR 19,82	APR 16,82	******	******	******	******	******	******	0.0129

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/DAILY/AEROCHEM #15

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAY 4,82	APR 23,82	1100	830	****	****	1	5.1	1	32523	2	1	78	CD	Z
MAY 6,82	MAY 4,82	800	830	****	****	1	14.0	1	32524	2	1	90	CD	Z
MAY 14,82	MAY 12,82	800	1315	****	****	1	21.8	1	32525	2	1	64	CD	Z
MAY 18,82	MAY 16,82	1315	1400	****	****	1	16.5	1	32526	2	1	104	CD	Z
MAY 20,82	MAY 19,82	830	1330	****	****	1	9.4	1	32527	2	1	90	C	C
JUN 7,82	JUN 6,82	900	900	2200	100	1	16.0	1	32528	2	1	76	CD	
JUN 8,82	JUN 7,82	900	900	****	****	1	22.0	1	32529	2	1	72	C	
JUN 15,82	JUN 14,82	900	900	****	****	1	7.8	1	32530	2	1	87	D	
JUN 17,82	JUN 16,82	900	900	****	****	1	4.6	1	32531	2	1	69	C	
JUN 22,82	JUN 21,82	900	900	1900	****	1	9.8	1	32532	2	1	104	D	C
JUL 6,82	JUL 5,82	1000	900	1200	400	1	24.0	1	32533	2	1	170	D	N
JUL 7,82	JUL 6,82	900	1000	****	****	1	3.6	1	32534	2	1	80	D	
JUL 17,82	JUL 16,82	900	1000	****	****	1	1.0	1	32535	2	1	43	C	N
JUL 24,82	JUL 23,82	800	1000	****	****	1	10.6	1	32536	2	1	****	DG	
AUG 3,82	AUG 2,82	800	800	****	****	1	4.5	1	32537	2	1	74	C	H
AUG 5,82	AUG 4,82	900	900	****	****	1	****	1	32538	2	1	****	C	
AUG 9,82	AUG 8,82	1100	1200	****	****	1	4.4	1	32539	2	1	68	D	C
AUG 20,82	AUG 19,82	800	800	****	****	1	14.0	1	32540	2	1	92	C	HM
SEP 9,82	SEP 8,82	800	800	****	****	1	6.2	1	32541	2	1	81	CD	HM
SEP 13,82	SEP 12,82	800	800	****	****	1	35.0	1	32542	2	1	98	C	HM
OCT 18,82	OCT 17,82	900	900	****	****	2	2.4	1	32543	2	1	29	C	N
NOV 16,82	OCT 18,82	900	900	****	****	3	****	2	32544	2	1	****	C	Z
NOV 20,82	NOV 19,82	900	900	****	****	3	11.5	2	32546	2	1	94		
DEC 9,82	DEC 8,82	900	900	****	****	2	0.2	2	32545	2	1	109	C	
DEC 23,82	DEC 22,82	900	900	****	****	2	0.4	2	32547	2	1	66	C	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/DAILY/AEROCHEM #15

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB	TOTAL H+ TO PH8.3 MG/L	SULPHATE MG/L		NITRATE AS N MG/L
MAY 4,82	APR 23,82		255.0	13.8	******	U	6.65	0.0244	2.20		0.42
MAY 6,82	MAY 4,82		812.0	10.6	******		5.92	0.0338	1.85		0.28
MAY 14,82	MAY 12,82		902.0	9.3	******		5.32	0.0312	1.30		0.25
MAY 18,82	MAY 16,82		1109.0	32.9	******		4.28	0.0952	3.70		0.47
MAY 20,82	MAY 19,82		547.0	5.7	******		5.26	0.0372	0.40		0.06
JUN 7,82	JUN 6,82		782.0	17.4	******		4.74	0.0610	3.15		0.23
JUN 8,82	JUN 7,82		1029.0	9.6	******		4.89	0.0512	0.85		0.15
JUN 15,82	JUN 14,82		435.0	7.5	******	U	6.29	0.0252	0.80		0.20
JUN 17,82	JUN 16,82		204.0	13.5	******		4.52	0.0470	1.30		0.23
JUN 22,82	JUN 21,82		659.0	2.4	******		5.45	0.0218	0.10	<W	0.01
JUL 6,82	JUL 5,82		2626.0	7.4	******		6.14	0.0244	0.85		0.23
JUL 7,82	JUL 6,82		186.0	4.6	******		5.38	0.0248	0.45		0.16
JUL 17,82	JUL 16,82	U	28.0	******	******		******	******	0.35		0.05
JUL 24,82	JUL 23,82		675.0	6.8	******		5.40	0.0238	0.80		0.24
AUG 3,82	AUG 2,82		214.0	5.9	******		5.28	0.0298	0.50		0.16
AUG 5,82	AUG 4,82		241.0	6.4	******		5.50	0.0222	0.75		0.21
AUG 9,82	AUG 8,82		194.0	2.0	******		6.08	0.0182	0.10		0.01
AUG 20,82	AUG 19,82		832.0	8.3	******		5.24	0.0332	1.35		0.25
SEP 9,82	SEP 8,82		324.0	3.9	******		5.27	0.0280	0.45		0.05
SEP 13,82	SEP 12,82		2201.0	5.5	******		4.96	0.0368	0.60		0.06
OCT 18,82	OCT 17,82	U	45.0	******	******		5.85	0.0254	1.50		0.26
NOV 16,82	OCT 18,82		1313.0	14.0	******		4.62	0.0522	1.80		0.24
NOV 20,82	NOV 19,82		699.0	9.8	******		4.70	0.0356	0.80		0.15
DEC 9,82	DEC 8,82		14.0	******	******	U	5.94	0.0306	******		******
DEC 23,82	DEC 22,82		17.0	******	******		4.91	0.0420	******		******

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : LAC LA CROIX/DAILY/AEROCHEM #15 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L		CHLORIDE MG/L		MAGNESIM MG/L		POTASSIM MG/L		SODIUM MG/L		AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAY 4,82	APR 23,82	0.52		0.15		0.100		0.140		0.150		0.840	U 0.0002
MAY 6,82	MAY 4,82	0.23		0.05		0.050		0.050		0.065		0.700	0.0012
MAY 14,82	MAY 12,82	0.21	<W	0.01		0.025		0.025		0.035		0.430	0.0048
MAY 18,82	MAY 16,82	0.18		0.06		0.030		0.040		0.035		0.500	0.0525
MAY 20,82	MAY 19,82	0.01	<W	0.01	<W	0.005	<T	0.015	<T	0.010		0.076	0.0055
JUN 7,82	JUN 6,82	0.36		0.10		0.040		0.185		0.060		0.670	0.0182
JUN 8,82	JUN 7,82	0.10		0.02		0.035	<T	0.010		0.015		0.132	0.0179
JUN 15,82	JUN 14,82	0.32		0.17		0.075		0.155		0.090		0.346	U 0.0005
JUN 17,82	JUN 16,82	0.18		0.06		0.045		0.035	<T	0.005		0.186	0.0302
JUN 22,82	JUN 21,82	0.02	<T	0.02	<W	0.005		0.030	<T	0.010		0.006	0.0035
JUL 6,82	JUL 5,82	0.36		0.06		0.060		0.065		0.055		0.360	0.0007
JUL 7,82	JUL 6,82	0.13		0.08		0.025		0.035		0.030		0.186	0.0042
JUL 17,82	JUL 16,82	******		0.15		******		******		******		******	******
JUL 24,82	JUL 23,82	0.13		0.05		0.030		0.065		0.025		0.278	0.0040
AUG 3,82	AUG 2,82	0.09		0.06		0.020		0.095		0.020		0.236	0.0052
AUG 5,82	AUG 4,82	0.20		0.09		0.050		0.110		0.035		0.190	0.0032
AUG 9,82	AUG 8,82	0.09		0.06		0.020		0.035		0.050		0.010	0.0008
AUG 20,82	AUG 19,82	0.14		0.11		0.030		0.045		0.040		0.238	0.0058
SEP 9,82	SEP 8,82	0.11		0.07		0.025		0.040		0.010		0.334	0.0054
SEP 13,82	SEP 12,82	0.04		0.05	<W	0.005		0.015		0.015		0.250	0.0110
OCT 18,82	OCT 17,82	******		0.30		******		******		******		******	0.0014
NOV 16,82	OCT 18,82	0.10		0.07		0.015		0.015		0.030		0.302	0.0240
NOV 20,82	NOV 19,82	0.02	<T	0.05	<W	0.005	<T	0.005	<T	0.010		0.162	0.0200
DEC 9,82	DEC 8,82	******		******		******		******		******		******	U 0.0011
DEC 23,82	DEC 22,82	******		******		******		******		******		******	0.0123

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : OJETICO CENTRE/DAILY/SES #14 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
JAN 3.82	JAN 2.82	800	800	800	800	2	11.1	2	33030	2	1	79	CD	
JAN 6.82	JAN 5.82	800	800	1200	1700	2	3.3	2	33031	2	1	60	CD	
JAN 8.82	JAN 7.82	800	800	2100	****	2	****	*	33032	2	1	****	CD	
JAN 11.82	JAN 10.82	800	800	1000	2100	2	5.9	2	33033	2	1	58	CD	
JAN 15.82	JAN 14.82	800	800	****	800	2	****	2	33034	2	1	****	CD	
JAN 19.82	JAN 18.82	800	800	2330	730	2	6.5	2	33035	2	1	47	CD	N
JAN 21.82	JAN 20.82	800	800	****	800	2	****	2	33036	2	1	****	CD	
JAN 22.82	JAN 21.82	800	800	****	730	2	****	2	33037	2	1	****	CD	
JAN 23.82	JAN 22.82	800	800	2000	800	2	25.1	2	33038	2	1	58	CDQ	
JAN 28.82	JAN 27.82	800	800	****	****	2	****	2	33039	2	1	****	CD	
JAN 30.82	JAN 29.82	1400	1700	****	****	2	2.1	2	33040	2	1	99	CD	
FEB 19.82	FEB 18.82	800	800	1200	1600	3	0.7	2	33041	2	1	108	CD	
FEB 23.82	FEB 22.82	800	800	900	2100	3	3.1	2	33042	2	1	97	CD	
MAR 1.82	FEB 28.82	800	800	900	2200	2	5.1	2	33043	2	1	54	C	
MAR 5.82	MAR 4.82	800	800	1100	1400	2	****	2	33044	2	1	****	C	
MAR 11.82	MAR 10.82	800	800	1100	2000	2	11.1	2	33045	2	1	90	CD	
MAR 13.82	MAR 12.82	800	800	1600	800	2	11.1	2	33046	2	1	120	C	N
MAR 14.82	MAR 13.82	800	800	800	2000	2	****	2	33047	2	1	****	CD	
MAR 16.82	MAR 15.82	800	800	1100	1500	2	1.3	2	33048	2	1	77	CD	
MAR 17.82	MAR 16.82	800	800	****	700	2	1.1	2	33049	2	1	129	CD	N
MAR 18.82	MAR 17.82	800	800	****	****	2	3.5	2	33050	2	1	100	C	
MAR 24.82	MAR 23.82	800	1030	2000	1030	2	5.1	2	33051	2	1	118	C	
MAR 25.82	MAR 24.82	1030	800	****	****	2	3.9	2	33052	2	1	50	C	C
MAR 30.82	MAR 29.82	800	1000	****	****	1	1.1	2	33053	2	1	125	C	N
MAR 31.82	MAR 30.82	1000	800	1000	800	3	4.3	2	33054	2	1	116	C	
APR 2.82	APR 1.82	800	800	****	****	1	3.3	2	33055	2	1	31	CDQ	NH
APR 3.82	APR 2.82	800	800	****	****	3	2.9	2	33056	2	1	155	C	NC
APR 4.82	APR 3.82	800	800	800	2300	3	6.1	2	33057	2	1	52	C	
APR 12.82	APR 11.82	800	800	****	800	1	0.5	2	33058	2	1	147	C	NH
APR 13.82	APR 12.82	800	800	800	1300	1	1.3	2	33059	2	1	209	CD	N
APR 15.82	APR 14.82	800	800	****	****	1	1.5	2	33060	2	1	134	CD	NH4
MAY 1.82	APR 30.82	800	800	1800	2000	1	****	2	33061	2	1	****	CD	H
MAY 4.82	MAY 3.82	800	800	****	****	1	2.7	2	33062	2	1	119	CD	H
MAY 5.82	MAY 4.82	800	800	800	****	1	7.1	2	33063	2	1	104	ACD	H

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/SES #14 PAGE : 2

REMOVAL DATE	EXPOSURE DATE		VOLUME ML		CONDUCT. UMHO/CM	PH FIELD		PH LAB		TOTAL H+ TO PHH.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
JAN 3,82	JAN 2,82		1440.0		9.9	******		4.81		0.0440		0.25		0.15
JAN 6,82	JAN 5,82		326.0		10.6	******		4.57		0.0590		0.50		0.38
JAN 8,82	JAN 7,82		182.0		******	******		4.51		******		0.35		0.39
JAN 11,82	JAN 10,82		569.0		******	******		5.01		0.0484		0.30		0.09
JAN 15,82	JAN 14,82		61.0		******	******		4.24		******		1.55		0.57
JAN 19,82	JAN 18,82	U	507.0		8.0	******		4.76		0.0532		0.25		0.22
JAN 21,82	JAN 20,82		115.0		******	******		4.74		******		0.20		0.13
JAN 22,82	JAN 21,82		27.0		******	******		4.58		******		******		******
JAN 23,82	JAN 22,82		2416.0		3.3	******		5.14		0.0426		0.20		0.05
JAN 28,82	JAN 27,82		48.0		******	******	U	5.57		******		******		0.48
JAN 30,82	JAN 29,82		343.0		10.2	******		4.69		0.0544		0.50		0.31
FEB 19,82	FEB 18,82		124.0		22.3	******		4.38		******		2.35		0.28
FEB 23,82	FEB 22,82		494.0		10.5	******		4.74		0.0678		0.95		0.17
MAR 1,82	FEB 28,82		458.0		33.7	******		4.32		0.0975		2.70		1.10
MAR 5,82	MAR 4,82		31.0		******	******		4.58		0.0598		1.15		0.50
MAR 11,82	MAR 10,82		1640.0		3.7	******		5.35		0.0406		0.20		0.06
MAR 13,82	MAR 12,82		2191.0		10.8	******		4.83		0.0506		1.25		0.14
MAR 14,82	MAR 13,82		103.0		******	******		5.02		0.0536		0.90		0.11
MAR 16,82	MAR 15,82		165.0		******	******		4.69		0.0540		0.90		0.29
MAR 17,82	MAR 16,82		234.0		35.2	******		4.11		0.1050		2.00		0.58
MAR 18,82	MAR 17,82		575.0		13.6	******		4.60		0.0564		0.75		0.14
MAR 24,82	MAR 23,82		991.0		13.5	******		4.72		0.0518		1.40		0.20
MAR 25,82	MAR 24,82		322.0		7.6	******		5.16		0.0364		0.75		0.05
MAR 30,82	MAR 29,82		227.0		37.8	******		4.30		0.0784		4.85		0.85
MAR 31,82	MAR 30,82		823.0		12.8	******		4.87		0.0444		1.30		0.26
APR 2,82	APR 1,82	U	172.0		8.4	******		5.42		0.0304		1.25		0.06
APR 3,82	APR 2,82		737.0		11.4	******		5.12		0.0430		1.40		0.21
APR 4,82	APR 3,82		527.0		9.1	******		4.85		0.0415		0.50		0.17
APR 12,82	APR 11,82		121.0		******	******	U	5.85	U	0.0406	U	5.10	U	1.11
APR 13,82	APR 12,82		447.0		14.2	******	U	6.18	U	0.0358		2.35		0.41
APR 15,82	APR 14,82		331.0		56.0	******	U	7.07	U	0.0560		6.90		1.34
MAY 1,82	APR 30,82		314.0	U	37.4	******	U	6.56	U	0.0480		6.85		1.08
MAY 4,82	MAY 3,82		531.0	U	28.4	******	U	6.20		0.0650		4.25		0.86
MAY 5,82	MAY 4,82		1212.0		6.4	******		5.81		0.0396		0.85		0.15

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/SES #14 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L		CHLORIDE MG/L		MAGNESIM MG/L		POTASSIM MG/L		SODIUM MG/L		AMMONIUM AS N MG/L		FREE H+ LAB MG/L	
JAN 3,82	JAN 2,82	0.04		0.10		<T 0.005		0.060		0.070		******		0.0155	
JAN 6,82	JAN 5,82	0.29		0.16		0.025		0.030		0.070		0.094		0.0269	
JAN 8,82	JAN 7,82	0.06		0.06		0.010		0.020		0.040		0.010		0.0309	
JAN 11,82	JAN 10,82	0.10		0.08		0.015		0.020		0.040	<T	0.020		0.0099	
JAN 15,82	JAN 14,82	******		0.12		******		******		******		0.198		0.0575	
JAN 19,82	JAN 18,82	0.03		0.10		<T 0.005		0.020		0.020		0.044		0.0174	
JAN 21,82	JAN 20,82	0.02		0.10		<T 0.005	<T	0.010		0.010		0.002		0.0182	
JAN 22,82	JAN 21,82	******		******		******		******		******		******		0.0263	
JAN 23,82	JAN 22,82	0.05		0.06		<T 0.005		0.010	<T	0.010	<T	0.002		0.0072	
JAN 28,82	JAN 27,82	******		0.27		******		******		******		******	U	0.0027	
JAN 30,82	JAN 29,82	0.17		0.14		0.020		0.030		0.050		0.098		0.0204	
FEB 19,82	FEB 18,82	0.11		0.11		0.010		0.010		0.065		0.430		0.0417	
FEB 23,82	FEB 22,82	0.08		0.08		<T 0.005		0.005		0.035		0.212		0.0182	
MAR 1,82	FEB 28,82	0.27		0.22		0.025		0.030		0.105		1.140		0.0479	
MAR 5,82	MAR 4,82	******		0.24		******		******		******		******		0.0263	
MAR 11,82	MAR 10,82	0.03	<W	0.01		<T 0.005	<T	0.005		0.005		0.084		0.0045	
MAR 13,82	MAR 12,82	0.06		0.04		0.005		0.010		0.030		0.318		0.0148	
MAR 14,82	MAR 13,82	0.29		0.20		0.045		0.170		0.140		******		0.0093	
MAR 16,82	MAR 15,82	0.20		0.09		0.025		0.040		0.040		0.114		0.0204	
MAR 17,82	MAR 16,82	0.13		0.18		0.010	<T	0.005		0.040		0.046		0.0776	
MAR 18,82	MAR 17,82	0.01		0.02		<T 0.005		0.010		0.035		0.024		0.0251	
MAR 24,82	MAR 23,82	0.19		0.04		0.010	<T	0.010		0.030		0.278		0.0191	
MAR 25,82	MAR 24,82	0.06		0.06		0.005	<T	0.015		0.040		0.126		0.0069	
MAR 30,82	MAR 29,82	0.57		0.20		0.085		0.035		0.105		1.110		0.0501	
MAR 31,82	MAR 30,82	0.17		0.07		0.010		0.030		0.040		0.350		0.0135	
APR 2,82	APR 1,82	0.15		0.26		0.020		0.150		0.210		0.268		0.0038	
APR 3,82	APR 2,82	0.23		0.06		0.035		0.035		0.035		0.264		0.0076	
APR 4,82	APR 3,82	0.10		0.04		0.010		0.035		0.020		0.030		0.0141	
APR 12,82	APR 11,82	U 0.95	U	0.44	U	0.095		0.065	U	0.215	U	2.050	U	0.0014	
APR 13,82	APR 12,82	U 0.46		0.13	U	0.080		0.030		0.045		0.980	U	0.0007	
APR 15,82	APR 14,82	U 3.42		0.23	U	0.260		0.285		0.115		3.550	U	0.0001	
MAY 1,82	APR 30,82	U 1.44		0.06	U	0.295		0.160		0.080	U	2.700	U	0.0003	
MAY 4,82	MAY 3,82	U 1.22		0.10	U	0.225		0.130		0.135	U	1.500	U	0.0006	
MAY 5,82	MAY 4,82	0.14	<W	0.01		0.030		0.060		0.060		0.350		0.0015	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14 PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	PRECIP START HR.	PRECIP END HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	COMMENTS OFFICE
MAY 10,82	MAY 9,82	800	800	1900	700	1	7.2	1	33064	2	1	97	C	H
MAY 11,82	MAY 10,82	800	800	2045	800	1	6.8	1	33065	2	1	95	C	H
MAY 13,82	MAY 12,82	800	800	2100	800	1	8.0	1	33066	2	1	91	CD	
MAY 14,82	MAY 13,82	800	800	****	****	1	13.4	1	33067	2	1	103	CD	
MAY 15,82	MAY 14,82	800	800	****	****	1	1.0	1	33068	2	1	51	CD	
MAY 16,82	MAY 15,82	800	800	2300	****	1	4.6	1	33069	2	1	87	C	
MAY 17,82	MAY 16,82	800	800	1200	****	1	3.2	1	33070	2	1	92	C	
MAY 18,82	MAY 17,82	800	800	800	****	1	5.8	1	33071	2	1	85	CD	
MAY 19,82	MAY 18,82	800	800	800	****	*	8.4	1	33072	2	1	92	C	
MAY 20,82	MAY 19,82	800	800	800	1500	1	1.2	1	33073	2	1	44	C	N
JUN 1,82	MAY 31,82	800	800	1100	****	1	3.2	1	33074	2	1	78	C	
JUN 2,82	JUN 1,82	800	800	800	1100	1	2.0	1	33075	2	1	47	CD	N
JUN 7,82	JUN 6,82	800	800	1900	700	1	6.5	1	33076	2	1	106	CD	H
JUN 8,82	JUN 7,82	800	800	800	800	1	2.0	1	33077	2	1	56	C	
JUN 10,82	JUN 9,82	800	800	800	800	1	24.4	1	33078	2	1	104	C	
JUN 11,82	JUN 10,82	800	800	800	1000	1	1.0	1	33079	2	1	54	C	
JUN 14,82	JUN 13,82	800	800	1700	****	1	14.8	1	33080	2	1	93		
JUN 21,82	JUN 20,82	800	1000	1400	800	1	13.6	1	33081	2	1	104		
JUN 24,82	JUN 23,82	800	900	2100	****	1	6.5	1	33082	2	1	107	CD	
JUL 3,82	JUL 2,82	800	900	2000	900	1	46.0	1	33083	2	1	91	D	
JUL 4,82	JUL 3,82	800	900	900	2300	1	16.0	1	33084	2	1	103	D	
JUL 5,82	JUL 4,82	900	800	****	****	1	8.6	1	33085	2	1	106		
JUL 6,82	JUL 5,82	800	800	1600	800	1	25.0	1	33086	2	1	195	CD	N
JUL 7,82	JUL 6,82	800	1200	800	800	1	8.6	1	33087	2	1	91	D	
JUL 13,82	JUL 12,82	800	1100	1500	1700	1	12.0	1	33097	2	1	15	D	N
JUL 15,82	JUL 14,82	800	800	500	700	1	8.2	1	33098	2	1	103	CD	H
JUL 18,82	JUL 17,82	800	800	500	800	1	7.8	1	33099	2	1	98		H
JUL 21,82	JUL 20,82	800	1000	****	900	1	2.8	1	33100	2	1	85	C	
JUL 28,82	JUL 27,82	800	1000	****	900	1	6.4	1	33101	2	1	97	CD	
AUG 3,82	AUG 2,82	800	1000	900	800	1	6.4	1	33102	2	1	97	CD	H
AUG 7,82	AUG 6,82	800	800	1000	1200	1	2.0	1	33103	2	1	78	C	
AUG 9,82	AUG 8,82	800	800	900	1900	1	14.5	1	33104	2	1	90		H
AUG 19,82	AUG 18,82	830	830	1800	****	1	8.6	1	33105	2	1	104		
AUG 22,82	AUG 21,82	800	800	1500	2200	1	8.0	1	33106	2	1	86		
AUG 23,82	AUG 22,82	800	800	****	****	1	1.2	1	33107	2	1	50	C	
AUG 25,82	AUG 24,82	800	800	1300	800	1	4.5	1	33108	2	1	87		HM
AUG 26,82	AUG 25,82	800	1100	800	800	1	1.4	1	33109	2	1	75		
SEP 1,82	AUG 31,82	800	1000	1230	1700	1	15.8	1	33110	2	1	94		
SEP 4,82	SEP 3,82	800	900	1200	****	1	16.2	1	33111	2	1	****	EG	
SEP 12,82	SEP 11,82	800	1100	****	800	1	4.4	1	33112	2	1	77	C	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14 PAGE : 2

REMOVAL DATE	EXPOSURE DATE		VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB	TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L
MAY 10.82	MAY 9.82		449.0	13.2	******		4.98	0.0546		2.05		0.37
MAY 11.82	MAY 10.82		418.0	12.5	******		5.93	0.0442		2.00		0.38
MAY 13.82	MAY 12.82		467.0	12.6	******		4.87	0.0426		1.35		0.15
MAY 14.82	MAY 13.82		889.0	14.2	******		4.70	0.0478		1.45		0.12
MAY 15.82	MAY 14.82		33.0	******	******		4.27	0.1032	U	10.90	U	2.08
MAY 16.82	MAY 15.82		259.0	******	******		4.03	0.1328		5.10		0.56
MAY 17.82	MAY 16.82		190.0	******	******		4.59	0.0632		3.00		0.40
MAY 18.82	MAY 17.82		317.0	******	******		4.53	0.0556		1.70		0.33
MAY 19.82	MAY 18.82		500.0	******	******		5.11	0.0362		0.65		0.08
MAY 20.82	MAY 19.82	U	34.0	******	******		5.99	0.0210		0.10	<W	0.01
JUN 1.82	MAY 31.82		162.0	8.6	******		4.80	0.0304		0.55		0.09
JUN 2.82	JUN 1.82	U	61.0	2.6	******		5.54	0.0188	<T	0.05	<W	0.01
JUN 7.82	JUN 6.82		444.0	13.6	******		4.86	0.0322		2.60		0.22
JUN 8.82	JUN 7.82		72.0	10.8	******		4.97	0.0388		1.00		0.16
JUN 10.82	JUN 9.82		1638.0	6.5	******		4.94	0.0340		0.55		0.07
JUN 11.82	JUN 10.82		35.0	******	******		5.58	0.2260		******		******
JUN 14.82	JUN 13.82		885.0	5.2	******		5.34	0.0302		0.50		0.10
JUN 21.82	JUN 20.82		910.0	5.1	******		5.07	0.0314		0.30		0.03
JUN 24.82	JUN 23.82		447.0	15.8	******	U	6.90	0.0246		1.25		0.48
JUL 3.82	JUL 2.82		2697.0	15.0	******		4.57	0.0434		1.60		0.28
JUL 4.82	JUL 3.82		1064.0	12.8	******		4.60	0.0398		1.30		0.13
JUL 5.82	JUL 4.82		586.0	5.9	******		5.31	0.0294		0.70		0.19
JUL 6.82	JUL 5.82		3130.0	5.0	******		5.94	0.0212		0.65		0.17
JUL 7.82	JUL 6.82		507.0	5.8	******		5.04	0.0264		0.30		0.14
JUL 13.82	JUL 12.82	U	118.0	******	******		4.59	0.0430		0.35		0.24
JUL 15.82	JUL 14.82		544.0	13.1	******		4.94	0.0384		1.63		0.45
JUL 18.82	JUL 17.82		490.0	9.4	******		5.26	0.0298		1.25		0.30
JUL 21.82	JUL 20.82		154.0	5.7	******		5.00	0.0230		0.30		0.16
JUL 28.82	JUL 27.82		398.0	6.1	******		5.68	0.0252		0.90		0.13
AUG 3.82	AUG 2.82		402.0	11.6	******		6.14	0.0400		1.35		0.37
AUG 7.82	AUG 6.82		101.0	******	******		4.51	0.0502		1.50		0.51
AUG 9.82	AUG 8.82		844.0	2.0	******		5.38	0.0206	<T	0.05	<W	0.01
AUG 19.82	AUG 18.82		576.0	12.0	******		4.81	0.0510		1.85		0.23
AUG 22.82	AUG 21.82		446.0	10.0	******		4.85	0.0684		1.25		0.23
AUG 23.82	AUG 22.82		39.0	******	******		5.21	0.0268		0.20		0.02
AUG 25.82	AUG 24.82		251.0	3.0	******		5.69	0.0292		0.20		0.06
AUG 26.82	AUG 25.82		68.0	******	******		5.22	0.0354		0.90		0.11
SEP 1.82	AUG 31.82		956.0	6.5	******		4.98	0.0424		0.65		0.13
SEP 4.82	SEP 3.82		600.0	******	******		******	******		******		******
SEP 12.82	SEP 11.82		218.0	9.1	******		4.87	0.0464		1.15		0.22

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14 PAGE : 3

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
MAY 10,82	MAY 9,82	0.35	<W 0.01	0.045	0.060	0.015	0.630	0.0105
MAY 11,82	MAY 10,82	0.38	0.01	0.050	0.105	0.100	0.830	0.0012
MAY 13,82	MAY 12,82	0.06	0.09	0.005	0.070	0.075	0.224	0.0135
MAY 14,82	MAY 13,82	0.04	0.06	<W 0.005	0.045	0.055	0.202	0.0200
MAY 15,82	MAY 14,82	******	U 0.72	******	******	******	******	0.0537
MAY 16,82	MAY 15,82	0.13	0.11	0.015	0.060	0.045	0.450	0.0933
MAY 17,82	MAY 16,82	0.19	0.13	0.025	0.115	0.090	0.590	0.0257
MAY 18,82	MAY 17,82	0.10	0.08	0.015	0.050	0.065	0.268	0.0295
MAY 19,82	MAY 18,82	<W 0.01	<W 0.01	<W 0.005	0.025	<W 0.005	0.112	0.0078
MAY 20,82	MAY 19,82	******	0.04	******	******	******	******	0.0010
JUN 1,82	MAY 31,82	0.06	0.04	0.010	0.030	0.035	0.046	0.0159
JUN 2,82	JUN 1,82	******	<W 0.01	******	******	******	******	0.0029
JUN 7,82	JUN 6,82	0.38	0.04	0.040	0.055	0.035	0.580	0.0138
JUN 8,82	JUN 7,82	******	0.03	******	******	******	******	0.0107
JUN 10,82	JUN 9,82	<T 0.01	<W 0.01	<W 0.005	<W 0.005	<T 0.010	0.082	0.0115
JUN 11,82	JUN 10,82	******	******	******	******	******	******	0.0026
JUN 14,82	JUN 13,82	0.10	0.01	0.020	0.025	<T 0.005	0.132	0.0046
JUN 21,82	JUN 20,82	0.02	0.01	0.005	<W 0.005	<T 0.005	0.034	0.0085
JUN 24,82	JUN 23,82	U 0.93	0.08	0.200	0.070	0.025	0.870	U 0.0001
JUL 3,82	JUL 2,82	0.20	0.05	0.035	0.020	0.025	0.280	0.0269
JUL 4,82	JUL 3,82	0.03	0.04	0.005	0.020	<T 0.005	0.214	0.0251
JUL 5,82	JUL 4,82	0.12	0.05	0.020	<T 0.015	<T 0.010	0.216	0.0049
JUL 6,82	JUL 5,82	0.24	0.05	0.040	0.035	0.050	0.254	0.0011
JUL 7,82	JUL 6,82	0.04	<T 0.02	0.005	<T 0.010	<T 0.005	0.108	0.0091
JUL 13,82	JUL 12,82	******	0.09	******	******	******	0.020	0.0257
JUL 15,82	JUL 14,82	0.30	0.07	0.065	0.025	<T 0.005	0.640	0.0115
JUL 18,82	JUL 17,82	0.33	0.11	0.045	0.105	0.060	0.420	0.0055
JUL 21,82	JUL 20,82	0.05	0.06	0.020	0.025	0.015	0.070	0.0100
JUL 28,82	JUL 27,82	0.12	0.04	0.050	0.030	<T 0.010	0.300	0.0021
AUG 3,82	AUG 2,82	0.31	0.17	0.060	0.210	0.065	0.730	0.0007
AUG 7,82	AUG 6,82	0.18	0.17	0.040	0.095	0.105	0.334	0.0309
AUG 9,82	AUG 8,82	0.02	<W 0.01	0.005	<T 0.015	0.015	0.008	0.0042
AUG 19,82	AUG 18,82	0.08	0.03	0.030	<T 0.015	<T 0.005	0.570	0.0155
AUG 22,82	AUG 21,82	0.18	0.07	0.055	0.045	<T 0.010	0.296	0.0141
AUG 23,82	AUG 22,82	******	0.05	******	******	******	******	0.0062
AUG 25,82	AUG 24,82	0.05	<W 0.01	0.020	<T 0.010	<T 0.005	0.168	0.0020
AUG 26,82	AUG 25,82	******	0.11	******	******	******	******	0.0060
SEP 1,82	AUG 31,82	0.05	0.07	0.005	0.010	0.020	0.186	0.0105
SEP 4,82	SEP 3,82	******	******	******	******	******	******	******
SEP 12,82	SEP 11,82	0.17	0.08	0.015	0.015	0.020	0.330	0.0135

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14 PAGE : 4

REMOVAL DATE	EXPOSURE DATE	SAMPLING START/END HR.	HR.	PRECIP START/END HR.	HR.	SAMPLE TYPE 01-RAIN 02-SNOW 03-COMP/04-ICE	GAUGE DEPTH(MM)	GAUGE TYPE 01-STD. 02-NIPHER	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	SAMPLER EFFICIENCY (%)	COMMENTS FIELD	OFFICE
SEP 13,82	SEP 12,82	1100	900	1100	****	1	15.4	1	33113	2	1	104	CD	HM
SEP 17,82	SEP 16,82	800	900	****	****	1	13.8	1	33114	2	1	95	C	HM
SEP 18,82	SEP 17,82	900	900	1400	1600	1	3.8	1	33115	2	1	75	ACD	HM
SEP 19,82	SEP 18,82	900	900	****	****	1	3.6	1	33116	2	1	70	C	HM
SEP 24,82	SEP 23,82	800	800	1100	****	1	6.6	1	33117	2	1	94	AC	H
SEP 28,82	SEP 27,82	800	800	****	****	1	16.2	1	33118	2	1	103		
SEP 29,82	SEP 28,82	800	800	800	1100	1	1.8	1	33119	2	1	72	C	
OCT 3,82	OCT 2,82	800	800	800	1900	1	27.0	1	33120	2	1	108	C	
OCT 4,82	OCT 3,82	800	1000	****	****	2	8.5	2	33131	2	1	81	CD	
OCT 5,82	OCT 4,82	1000	800	1100	1300	1	1.2	1	33121	2	1	37	C	N
OCT 6,82	OCT 5,82	800	1000	****	****	1	14.8	1	33122	2	1	100		
OCT 7,82	OCT 6,82	800	800	800	800	1	24.4	1	33123	2	1	104		
OCT 8,82	OCT 7,82	800	800	****	****	1	2.8	1	33124	2	1	85		HM
OCT 10,82	OCT 9,82	900	800	1600	2400	1	14.6	1	33125	2	1	98		
OCT 11,82	OCT 10,82	800	900	****	****	1	1.4	1	33126	2	1	60		
OCT 12,82	OCT 11,82	800	800	800	800	1	4.0	1	33127	2	1	96		
OCT 13,82	OC 12,82	800	800	****	****	1	0.7	1	33128	2	1	40		N
OCT 17,82	OC 16,82	800	800	****	****	1	3.1	2	33129	2	1	107		H
OCT 18,82	OCT 17,82	800	800	1100	1500	1	6.3	2	33130	2	1	110		H
OCT 29,82	OCT 28,82	800	800	2200	800	1	9.9	2	33132	2	1	101		
OCT 30,82	OCT 29,82	800	800	2100	****	1	2.1	2	33133	2	1	105	A	HM
NOV 4,82	NOV 3,82	800	1100	800	700	2	18.5	2	33134	2	1	58	C	HM
NOV 8,82	NOV 7,82	800	800	1000	1300	3	3.3	2	33135	2	1	63	C	
NOV 11,82	NOV 10,82	800	800	800	****	3	8.3	2	33136	2	1	53	F	
NOV 12,82	NOV 11,82	800	800	****	****	3	3.3	2	33137	2	1	****	EF	
NOV 19,82	NOV 18,82	800	1100	1900	1100	1	2.3	2	33138	2	1	75		
NOV 20,82	NOV 19,82	1100	800	****	****	1	5.6	2	33139	2	1	213		N
NOV 21,82	NOV 20,82	800	800	800	1400	1	****	2	33140	2	1	****	C	H
NOV 22,82	NOV 21,82	800	800	800	800	3	6.7	2	33141	2	1	****	EF	
DEC 24,82	DEC 23,82	800	800	900	1400	1	5.1	2	33142	2	1	65	C	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14 PAGE : 5

REMOVAL DATE	EXPOSURE DATE	VOLUME ML	CONDUCT. UMHO/CM	PH FIELD		PH LAB	TOTAL H+ TO PH8.3 MG/L		SULPHATE MG/L		NITRATE AS N MG/L	
SEP 13,82	SEP 12,82	1031.0	7.7	******		4.78	0.0560		0.80		0.09	
SEP 17,82	SEP 16,82	847.0	5.2	******		4.93	0.0326		0.45		0.10	
SEP 18,82	SEP 17,82	184.0	11.1	******	U	6.19	0.0570		0.75		0.02	
SEP 19,82	SEP 18,82	162.0	10.2	******	U	6.46	0.0358		0.85		0.12	
SEP 24,82	SEP 23,82	398.0	11.0	******		5.54	0.0538		1.45		0.38	
SEP 28,82	SEP 27,82	1072.0	16.7	******		4.48	0.0666		1.95		0.33	
SEP 29,82	SEP 28,82	84.0	******	******	U	5.60	0.0392	U	8.65	U	1.13	
OCT 3,82	OCT 2,82	1875.0	7.2	******		4.98	0.0304		0.90		0.07	
OCT 4,82	OCT 3,82	443.0	3.4	******		5.17	0.0448		0.20		0.13	
OCT 5,82	OCT 4,82	U 29.0	******	******		6.05	0.0320		1.40		0.59	
OCT 6,82	OCT 5,82	950.0	8.3	******		4.89	0.0414		0.80		0.16	
OCT 7,82	OCT 6,82	1631.0	20.5	******		******	******		2.35		0.22	
OCT 8,82	OCT 7,82	153.0	******	******		4.66	0.0494		0.85		0.09	
OCT 10,82	OCT 9,82	924.0	10.8	******		4.60	0.0594		0.95		0.11	
OCT 11,82	OCT 10,82	54.0	******	******		4.44	0.0660		2.15		0.47	
OCT 12,82	OCT 11,82	247.0	8.9	******		4.68	0.0490		0.80		0.11	
OCT 13,82	OCT 12,82	U 18.0	******	******		4.56	0.0580		******		******	
OCT 17,82	OCT 16,82	214.0	4.4	******		5.40	0.0440		0.45		0.07	
OCT 18,82	OCT 17,82	446.0	8.9	******		4.92	0.0472		1.00		0.25	
OCT 29,82	OCT 28,82	645.0	6.4	******		4.89	0.0550		0.60		0.10	
OCT 30,82	OCT 29,82	142.0	******	******		5.08	0.0426		0.75		0.20	
NOV 4,82	NOV 3,82	690.0	2.6	******		5.12	0.0384		0.15		0.03	
NOV 8,82	NOV 7,82	134.0	******	******		5.05	0.0426		1.15		0.39	
NOV 11,82	NOV 10,82	282.0	4.8	******		5.13	0.0224		0.30		0.08	
NOV 12,82	NOV 11,82	******	******	******		******	******		******		******	
NOV 19,82	NOV 18,82	112.0	******	******		4.10	0.1022		2.65		0.48	
NOV 20,82	NOV 19,82	767.0	12.0	******		4.49	0.0594		1.15		0.17	
NOV 21,82	NOV 20,82	285.0	7.2	******		4.88	0.0544		0.85		0.21	
NOV 22,82	NOV 21,82	******	******	******		******	******		******		******	
DEC 24,82	DEC 23,82	215.0	20.0	******		4.53	0.0558		2.10		0.38	

ONTARIO MINISTRY OF THE ENVIRONMENT
DAILY SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : QUETICO CENTRE/DAILY/AEROCHEM #14

REMOVAL DATE	EXPOSURE DATE	CALCIUM MG/L	CHLORIDE MG/L	MAGNESIM MG/L	POTASSIM MG/L	SODIUM MG/L	AMMONIUM AS N MG/L	FREE H+ LAB MG/L
SEP 13,82	SEP 12,82	0.09	0.04	0.015	0.020	0.030	0.184	0.0166
SEP 17,82	SEP 16,82	0.02	0.05	<W 0.005	0.025	0.030	0.218	0.0117
SEP 18,82	SEP 17,82	0.10	U 0.51	0.045	U 0.585	U 0.350	0.690	U 0.0006
SEP 19,82	SEP 18,82	0.50	U 0.35	0.115	0.425	U 0.270	0.410	U 0.0003
SEP 24,82	SEP 23,82	0.41	0.19	0.045	0.240	0.180	0.630	0.0029
SEP 28,82	SEP 27,82	0.23	0.10	0.025	0.060	0.040	0.420	0.0331
SEP 29,82	SEP 28,82	U 2.00	U 0.40	0.300	0.360	U 0.280	******	U 0.0025
OCT 3,82	OCT 2,82	0.09	0.08	<W 0.005	0.045	0.030	0.194	0.0105
OCT 4,82	OCT 3,82	0.09	0.09	0.010	0.040	0.045	0.090	0.0068
OCT 5,82	OCT 4,82	******	******	******	******	******	******	0.0009
OCT 6,82	OCT 5,82	0.09	0.03	0.005	0.020	<W 0.005	0.178	0.0129
OCT 7,82	OCT 6,82	0.05	0.05	0.005	0.030	U 0.015	0.364	******
OCT 8,82	OCT 7,82	0.07	0.04	0.010	0.020	0.260	0.116	0.0219
OCT 10,82	OCT 9,82	0.03	0.03	<W 0.005	0.020	0.010	0.078	0.0251
OCT 11,82	OCT 10,82	******	U 0.23	******	******	******	******	0.0363
OCT 12,82	OCT 11,82	<T 0.01	0.04	<W 0.005	0.015	0.010	0.096	0.0209
OCT 13,82	OCT 12,82	******	******	******	******	******	******	0.0275
OCT 17,82	OCT 16,82	0.05	0.13	<W 0.005	0.080	0.100	0.196	0.0040
OCT 18,82	OCT 17,82	0.18	0.09	0.015	0.060	0.050	0.350	0.0120
OCT 29,82	OCT 28,82	0.04	0.04	<W 0.005	0.010	0.010	0.176	0.0129
OCT 30,82	OCT 29,82	0.09	0.08	0.005	0.015	0.055	0.084	0.0083
NOV 4,82	NOV 3,82	0.04	0.03	<W 0.005	0.015	0.020	0.016	0.0076
NOV 8,82	NOV 7,82	U 0.47	0.11	0.060	0.020	0.030	0.258	0.0089
NOV 11,82	NOV 10,82	0.05	0.06	<W 0.005	<W 0.005	0.010	0.026	0.0074
NOV 12,82	NOV 11,82	******	******	******	******	******	******	******
NOV 19,82	NOV 18,82	0.10	0.05	<W 0.005	0.015	0.020	0.306	0.0794
NOV 20,82	NOV 19,82	0.09	0.03	0.005	0.020	0.020	0.136	0.0324
NOV 21,82	NOV 20,82	0.06	0.04	<W 0.005	0.020	0.040	0.342	0.0132
NOV 22,82	NOV 21,82	******	******	******	******	******	******	******
DEC 24,82	DEC 23,82	0.18	U 0.51	0.020	0.375	U 0.370	0.390	0.0295